

GROWTH AND STABILIZATION POLICIES
IN AN EXPANDING ECONOMY:
TURKEY, 1963-1983

By

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INTRODUCTION

This study attempts to provide a thorough analysis of the economic sectors that affect Turkey's growth and development process. The analysis is carried out in two major sections. What divides the line between these two sections is the implementation of a new economic stabilization program. This stabilization program is implemented in an attempt to establish a balance on both domestic and foreign economic affairs. Mainly though, it is the stabilization of the domestic price level, and the reduction or the elimination of the current account deficit of the balance of payments. This program underlined the starting of a new era in the Turkish economy. The the main philosophy behind the new era was to depart from a regulated, controlled, and closed economy to one where market forces and foreign competition could play major roles.

The first section covers the socio-economic growth and development patterns of Turkey since the establishment of the Republic. It examines the factors that contribute to its population growth, employment policies, and educational system. Also a brief analysis is provided which compares Turkey with other middle income countries on the basis of selected social indicators.

The second chapter analyzes the stages of economic development, and the role of government in the development of the economy. The establishment of the State Economic Enterprises is realized within the theoretical framework of "etatism", where the main idea behind this movement was that government owned enterprises should provide the necessary stimulus to economic growth and development. The discussion of the performance and the problems of SEEs is also provided along with some

recommendations that may be taken into consideration in the future by policymakers. Lastly, it analyzes the development plan period (1960-onwards), and the circumstances that have led to the implementation of the economic stabilization package of 1980.

The second section looks at the era of economic stabilization. The effects of the measures taken can clearly be observed, especially on the dynamics of inflation. The tests in an attempt to find the relationship between money supply and prices in Turkey are conducted via monetarist models. This is due to the fact that not only various analysts have based their inflation studies in developing countries on monetarist models, but also their results, including for Turkey, show that there is almost one to one correspondance between the growth of the money supply and the rate of inflation.

The success of the naive monetarist model in explaining the rate of inflation in Turkey has led to a crude form of monetarism, where policy prescriptions are based primarily on the control of the money supply. Thus, the implementation of the strict monetary policies has yielded very positive, beneficial results in reducing the rate of inflation in Turkey.

Turkey followed a inward oriented pattern of industrialization until 1980. The inefficiencies, low productivity experienced in domestic production -mostly due to non-competitive domestic market structure-, and an overvalued exchange rate system led to a decline in the country's economic growth rate, increased deficits of the public sector, financed mostly through the Central Bank, causing a rise in the rate of inflation, and the elimination of the incentives to export, thus causing inefficiencies in domestic resource allocation. Also the delayed adjustment policies to external shocks of 1973-1974 created further

problems.

Following the 1980 Stabilization Package structural changes in the Foreign Trade Regime have been observed. The liberalization of the Import Regime, daily adjusted, more realistic exchange rate system, and increased incentives for exports are some of these structural changes. This section also examines the relationship between exports and economic growth, and the effects of foreign capital inflows and foreign aid on economic growth. Empirical tests conducted in this section also help us to draw conclusions on the effects of the above mentioned variables on economic growth.

PART ONE

SOCIO-ECONOMIC GROWTH
AND
DEVELOPMENT PATTERNS
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CHAPTER I

MAJOR SOCIAL AND ECONOMIC SECTORS

1. Introduction

This chapter provides a summary description of the social and economic sectors which affect the country's growth and development process. It examines the factors that contribute to its population growth, employment policies, and educational system. The final section compares Turkey with other middle income countries on the basis of their selected social indicators.

2. Population Trends

Following the foundation of the Republic in 1923, the first census was conducted in 1927, followed by a second census in 1935. Since then censuses have been repeated at five year intervals. Unfortunately, census results previous to 1935 have to be treated with some caution, although the censuses taken since 1935 can be regarded as reasonably accurate. (In particular the 1927 census almost certainly under-numerated the population, and probably accounts for the apparently high growth rate for 1927-1935).¹

Between 1927 and 1950 the Turkish population increased about 2 percent per year, but improvement in health practices and the resulting decline in mortality brought the annual rate for 1950-1960 up to 2.9 percent.² Yet, the growth in population is somewhat understated since

Turkish censuses exclude Turks living abroad.

TABLE 1
AVERAGE ANNUAL RATES OF POPULATION GROWTH
1927-35 to 1960-65
(in percent)

	total(a)	urban	rural
1927-35	2.2	2.1	2.2
1935-40	1.9	2.9	1.6
1940-45	1.1	0.9	1.2
1945-50	2.2	2.0	2.2
1950-55	2.9	5.8	1.9
1955-60	2.9	5.2	1.9
1960-65	2.5	4.0	1.7

(a) When adjustment is made for the immigrants arriving in the 1950-66 period (144,239) and in the 1955-60 period (138,806) and for the outflow of Turkish workers to Western Europe in the 1960-65 period (approximately 200,000) the following rates of natural increase is derived :

1950-66, 2.7 percent; 1955-60 period, 2.8 percent; 1960-65, 2.6 percent.

Source : E.J.Cohn, Turkish Economic, Social, and Political Change, (New York: Praeger Publishers, 1970), p. 176.

Recognition that this high rate of increase consumed much of the resources that would otherwise be used to raise both current consumption and investment together with the humanitarian desire to improve material health and child welfare led to the adoption of a new official policy of encouraging voluntary family planning, which in fact was strongly endorsed by the First Five Year Development Plan.

Trends in Fertility and Mortality Rate

The Turkish transition from high birth and death rates

was well advanced by the mid 1970's, but it was still far from reaching the low levels of European countries. The State Planning Organization (SPO) has used the censuses to make rough estimates of birth and mortality rates since 1935. These indicate a slowly rising annual birth rate, from 38.3 per thousand in 1935-40 to 44 per thousand for 1960-70 combined with a fall in the death rate from 27.2 per thousand for 1940-45³ to 14.5 per thousand for 1960-70.

During 1977-78, life expectancy at birth averaged 61 years, the infant mortality rate was approximately 126 deaths per thousand births, the crude birth rate was 34.9 per thousand population, and the total fertility rate was 4.3 per woman.⁴

There are, in fact, very sharp differences in fertility rates between the western and less developed eastern regions, and with increasing urbanization fertility rates can be expected to fall. "Fertility is inversely correlated with literacy, so that the cohort of females with the highest reproductive age will be progressively more educated. The rate of decline will also depend upon the rate of urbanization, and the kinds of employment opportunities offered to new migrants. Studies of differential fertility in Turkey have shown that the fertility rate of village-born women hardly change when they move to the cities unless they also experience a change in their socio-economic status."⁵

The national decline in death rates reaches back to the early 1930's. This trend over these 50 years is downward, except for a rise in death rates during WW II. Although Turkey was not involved militarily, the material conditions of life deteriorated, and there were a number of serious epidemics, both of which explain the reversal of the trend.

The decline in mortality brought an increase in the growth rate to a level averaging 2.8 percent per year during the 1950's. Falling fertility and labor migration reduced the rate approximately 2.4 percent per year in the early 1970's. Declining fertility initially lowers the death rate through its effects on the age structure at the same time as it lowers birth rates. The latter effect is the stronger one. The decline in fertility in Turkey has not only brought a modest reduction in the growth rate, but has positioned the structure of the population for more decline in the future.

Future Trends

The present population in Turkey is approximately 48.5 million. The State Planning Organization (SPO) expects that by 1995 the urban population will have increased to 75 percent of the total population so that Turkey will have been transformed from a predominantly rural country to a mainly urban country in less than half a century, a rapid transformation by historical standards. The largest cities are expected to grow much faster than the medium sized and smaller urban cities.

For purposes of long range planning, the SPO has made series of alternative estimates of population growth to 1995 based on assumptions of high, medium and low fertility rates. These projections are shown in table 2 below. Comparison of these estimates with the totals actually reported in 1975 and 1980 censuses is complicated by the fact that the projections took no account of emigration.

It seems that the actual population is closely associated with low fertility rates, which corresponds to annual average rise of 2.3 percent.

If this average annual rise is to stay constant, the population is expected to double in 30.4 years.⁶

TABLE 2
POPULATION PROJECTIONS 1970-1995
(in millions)

fertility	1970 (actual)	1975	1980	1985	1995	ave.annual rise (%) 1970-1995
High	35.7	40.8	47.3	55.2	76.3	3.1
Medium	35.7	40.5	46.2	52.9	69.1	2.7
Low	35.7	40.2	45.2	50.7	62.8	2.3
Actual	35.7	40.2	45.2			

Source : SPO, Third Five Year Development Plan 1973-77
Ankara, SPO, 1983) p.647 table 2.1

Employment

Turkish development planning focuses primarily on rapid growth and modernization through industrial development, mostly growth of manufacturing industry, since this is regarded as the ultimate basis for economic and social development.

The import substituting development strategy that was followed channelled a relatively large part of investment to sectors with high incremental capital-labor ratios. This trend became more pronounced with the progress of import substitution into basic and intermediate goods industries in the 1970's.

Some of the institutional policies that have caused factor price distortions can be stated as follows:

- (1) The policy of maintaining an over-valued domestic relative to

foreign currency has created a bias in favor of capital intensity. The implicit subsidy on imported capital equipment provided by this policy has increased capital-labor ratios.

(2) The policy of maintaining relatively low interest rates on borrowing has also encouraged capital intensive investment. Although some measures raised nominal interest rates significantly, given the rapid increase in prices, real interest rates continued to be highly negative until the mid 1980s.

(3) The over-valued domestic relative to foreign currency, and the low interest rates compounded by direct subsidization of the price of machinery have led to an enormous increase in mechanization in agriculture. The number of tractors increased from 44,000 in 1962 to 325,000 in 1978. There were 20,000 harvesting combines in use in 1977.⁷ Although this had a positive impact on production, it had major implications for displacement of labor in agricultural occupations.

(4) Industrial labor is highly organized in Turkey. Partly as a result, the total cost of employing labor includes significant fringe benefits as well as high wages and substantial social security contributions. Consequently, the relative low capital costs resulting from exchange rate and interest rate policies when set against relatively high total labor costs strengthened the bias towards capital intensity.

(5) The re-orientation of development policies towards exports and the measures that are being taken to implement them will inevitably have an impact on the allocation of investment, and on employment growth. However, the structural changes implied in a move towards an outward oriented pattern of development will take time, and the major impact on employment will probably be seen in the Fifth or later plan periods.

The State Institute of Statistics (SIS) defines the labor force as: "persons at a specific age and older who were employed or unemployed during the week prior to the census or survey." Employed is defined as "persons who during the week prior to the census or survey, did work for pay or profit, were unpaid family workers, or who had a job but temporarily were not working." Another term that also needs to be defined is unemployed, which is "persons who during the week prior to the census or survey, did not work but looked for work."

The State Planning Organization estimates unemployment (open and disguised) outside agriculture at 0.8 million or 14.5 percent of the non-agricultural labor force. However, only around 4.9 percent of urban labor force was recorded as unemployed in 1969. Nearly 42 percent of the unemployed were between the ages 15 and 24 and over half belonged to two occupational groups, "craftsman, repairman", and "unclassified". (See table 3 for the projections of labor supply and demand outside the agricultural sector).

4. Education

The educational system is a crucial constraint on political social and economic development. The central role of education in producing enlightened citizens able to govern themselves and train the manpower possessing the diverse professional skill that an increasingly complex industrializing society requires has become widely recognized in Turkey, as elsewhere.

TABLE 3
PROJECTIONS OF LABOR SUPPLY AND DEMAND OUTSIDE AGRICULTURE
(Millions of laborers)

	ACTUAL 1965-70	TURKISH DEVELOPMENT STRATEGY		
		1972-77	1977-86	1986-95
supply of non-agricultural labor				

Growth of civilian labor force	2.0	2.1	5.0	5.0
Decrease in agricultural labor(1)	-	0.2	0.6	1.8
Total additional supply	2.0	2.3	5.6	6.8
new demand for non-agricultural labor				

Industry	0.3	0.6	1.3	2.2
Services	0.8	1.0	3.4	5.8
Emigration	0.3	0.4	0.0	0.0
Total additional demand	1.4	2.0	4.7	8.0
Change in Unemployment	0.6	0.3	0.9	-1.2

(1) Excluding changes in agricultural underemployment

Source : The Third Five Year Plan, SPO, Ankara 1972

The extension and improvement of the educational system has long been one of Turkey's main social needs. Although rapid progress has been made in various fields, from the reduction of illiteracy to a number of personnel with technical qualities, the demand for education and for skilled manpower is greater than the existing system can meet.

Since the establishment of the Republic, the scope of education was broadened with the opening of additional schools at various levels, and the expansion of university level education. Arab script was replaced in 1928 by a modified Latin alphabet, which greatly facilitated the spread of literacy.

These, as well as other accomplishments show the seriousness of the effort that successive Turkish governments have made to raise the educational level. The magnitude of this effort is also reflected in the increasing share of the budget, and the GNP allocated to the Ministry of Education. These allocations rose from 11.0 percent to 13.0 percent and from 1.5 percent to 2.9 percent respectively, between 1948 and 1968.¹⁰

The formal educational system consists of three levels: basic, secondary, and higher education. Basic education is divided into two cycles; the first cycle consists of primary school for children 7 to 12 years of age. The second cycle consists of a additional three years of middle school. In the following three years of secondary education, students either attend a general lycee (high school) or go to technical or vocational schools.

Since the universal primary education is a constitutional requirement, the Second Development Plan had aimed at increasing primary school attendance to 100 percent. Considerable progress has been made in the last 20 to 25 years in extending primary education.

TABLE 4
LITERACY IN TURKEY
(in percent of population over 6 years)

literacy level	1945	1950	1955	1960	1965	1970	1975
Males	34.97	38.52	44.79	46.87	52.34	69.00	78.00
Females	13.70	16.55	20.59	22.56	26.85	40.00	55.00
Total	24.03	27.59	32.89	34.93	39.84	54.50	67.93

Source : World Bank Country Study, Washington, D.C. March 1980

TABLE 5
PRIMARY SCHOOL ENROLLMENT
(in thousands and in percent)

	age group	total students	enrollment rate %
1955-1956	3,252	1,984	61.00
1960-1960	4,245	2,867	67.50
1965-1966	5,061	3,932	77.70
1970-1971	5,292	4,992	83.60
1977-1978	8,359	7,762	92.80

Source : World Bank Country Study, Washington, D.C. March 1980

The achievements of expanding the educational system so that more and more Turks are not only able to attend school, but also have the opportunity to pursue their studies to a higher level, even though leaving much to be desired, would inspire greater confidence for Turkey's future if the education dispensed were of a higher quality, and greater relevance. The educational problems will not be solved by expanding the present educational system so that it can produce more of the same.

The single most important problem that underlines the weakness of this system is that at all levels of education there is an emphasis on memorization and copying almost totally neglecting analysis and problem solving approach. What this approach of memorization and copying does not do is to sharpen the mind as an analytical tool, develop evaluative capabilities, or furnish guidance in dealing with the unfamiliar situations for which no ready-made answer is provided, but that students are going to face in real life in a rapidly changing world.

TABLE 6
ENROLLMENT RATIOS AT VARIOUS LEVELS OF EDUCATION
(percent of relevant age group)

	1973-74	1977-78
Basic Education: First stage (7-12)	90.0	92.0
Basic Education: Second stage (13-15)	44.3	50.7
General Lycee (High School) (16-18)	13.2	13.4
Technical & Vocational Schools (16-18)	6.5	11.5
Higher Education	7.1	9.0

Source : World Bank Country Study, Washington, D.C. March 1980

5. A Brief Look At Social Indicators

A comparison of the level of selected social indicators in Turkey and other middle income countries (see table 7) presents a rather favorable picture. While the adult literacy rate in Turkey is significantly below that of the average for middle income countries, life expectancy at birth is around the average, and the ratio of physicians to population much better. A relatively high proportion of the people have access to safe water. Per capita supply of calories in Turkey is also significantly higher than the average for middle income countries. Therefore, it seems correct to conclude that on the whole, past growth policies have provided Turkish people with a standard of living on par with that enjoyed by the population of other large middle income countries. (Table 7 gives more detailed data on social indicators, between the period 1960-1977)

TABLE 7
COMPARATIVE DATA ON SOCIAL INDICATORS
1960-1977

	Adult Literacy Rate (%) 1975	Life Expect. At Birth (years) 1977	Per capita energy consumption kg.coal.eq. 1976	Pop. per physician (units) 1976	Pop.w/ access to safe water (%) 1974	Daily per capita calorie supply 1974
Turkey	67	61	743	1720	75	2846
Argentina	93	71	1804	530	66	3408
Brazil	76	62	731	1650	77	2516
China, Rep.of	82	72	1797	1590	..	2780
Colombia	81	62	685	1820	64	2183
Egypt	44	54	473	1190	66	2637
Korea, Rep.of	91	63	1020	1680	62	2630
Mexico	76	65	1227	62	2727
Peru	72	56	642	1580	47	2360
Philippines	87	60	329	3150	38	1971
Thailand	82	61	308	8460	22	2382
Yugoslavia	85	69	2016	790	..	3462
Average for 55 MIC's (Middle Income Countries)	69	60	916	4470	59	2557

Source : World Development Report, IBRD, 1979.

NOTES

1. Besim Darkot, Demographic Movements in Turkey. Review of Geography Institute of University of Istanbul (International Edition), No.2, 1955, p.39.

2. Edwin J. Cohn, Turkish Economic, Social, and Political Change. (New York: Praeger Publishers, 1970), p.176.

3. State Planning Organization, Second Five Year Development Plan, 1968-72, (Ankara:SPO, 1969) p.57; SPO, Third Five Year Development Plan, 1973-77, (Ankara:SPO, 1973), p.107.

4. Trends in Fertility and Mortality in Turkey, 1935-75. Committee on Population and Demography, No.8, (National Academy Press: Washington, D.C. 1982), p.6.

5. Timur Serim, Socio-economic Determinants of Differential Fertility in Turkey. (Hacettepe University, Ankara: Institute of Population Studies, 1971), p.9

6.
$$P = P_0 (1+k)^n$$
 where P = expected future population;
 P_0 = current population; n = number of years; $k=0.023$ (constant, annual average rise in population).

7. Turkey : Policies and Prospects for Growth, The World Bank Publications Unit, (Washington, D.C., March 1980), p. 133.

8. State Institute of Statistics, Ankara: SIS, 1981, p.189.

9. Turkey: Prospects and Problems of an Expanding Economy, The World Bank Publications Unit, (Washington, D.C., February 1975), pp.153-154.

10. E. Cohn, Turkish Economic, Social, Political Change, p.101.

CHAPTER II

THE ROLE OF GOVERNMENT IN THE ECONOMY

1. Evolution of Economic Policy

It was the 1923 Izmir Economics Congress which established the foundations of government policies for the economy. Ataturk, the founder of modern Turkey, addressed the Congress with the following lines :

" ...To propel our new Turkey forward to the level of evolution in which she is worthy, we are obliged, whatever happens, to put the economy first... However great may be the political and military victories, the success achieved cannot last unless it is crowned with economic victories, and will soon vanish. " (1)

While the Congress was in progress, two policy issues were debated at length. The first one was the role of government in the development of the economy. It was made clear that the government was ready to allow private enterprise the major role in industrial development, and to limit the government intervention to basic public utilities, and certain state monopolies which primarily had a fiscal purpose.

The second one concerned the role of foreign capital in economic development. It became clear that the state was to be responsible for major infrastructure investments, especially the railways.

Apart from the railways, direct government investment was mainly limited to the state monopolies. These had been established primarily to raise revenue, and help to develop certain industries. It was not until the late 1920's when the government shifted its economic philosophy from

a free enterprise orientation to a one called, " Etatism ". The main idea behind this movement was that government owned enterprises should provide the necessary stimulus to economic growth and development. This was followed by the establishment of State Economic Enterprises (SEEs) in the industrial field. Plans were made for the protection of infant industries with emphasis being placed on the development of domestic textile, chemical and iron industries through these state enterprises.

2. Birth of Etatism

The birth of Etatism, and perhaps the use of this concept as an official policy was inevitable. There was relatively little government intervention in the industry throughout the 1920's, yet the very slow rate of increase per capita income during this period contributed to general scepticism about the free enterprise system. By regaining rights to impose taxes and tariffs (also referred as Capitulations), the government increased its range of policy alternatives. The sharp decline in export earnings due to the Great Depression also forced a shift in the government's economic policies.

This shift was towards " Etatism ". Bernard Lewis defines etatism as the intervention of the state as a pioneer and director of industrial activity, in the interest of national development and security in a country in which private enterprise is either suspect or ineffective.²

Ataturk used the term etatism in the following context :

The completely demographic and populist programme followed by our party is etatist from the economic point of view. The government of our party is interested in the life, the comfort and the future of our citizens from every angle. Our people are

naturally statist because they see it as their right to demand from the state all sorts of remedies to their problems. (3)

If the country's stagnant economic situation, continuous decline in per capita income, and debt burden are taken into consideration one cannot conclude that the government's intentions were to supersede private enterprise. Goymen notes that numerous statements were made by influential leaders in the early 1930's, emphasizing the basic and predominant place of private enterprise in the Turkish economy, and essentially temporary role of etatism.⁴ He also cites some of the leaders' speeches in which they suggest that, whenever possible, the state should join private capital, in industrial ventures, or, where this was not possible, sell the shares owned by the state to private enterprise at an early opportunity and on easy terms.⁵

According to Goymen, Turkey rejected the theory of international division of labor on the basis of comparative advantage. The dichotomy that it implied between industrial and agricultural countries, as in the words of the then Ministry of Economy, would have forced Turkey " ..to accept colonial status."⁶ This may sound harsh, and extreme, yet we should keep it in mind that this statement was made in reference to the Lousanne Treaty, which severely restricted Turkey's rights to levy import duties (capitulations).

The ideology during that time was that national sovereignty had to be strengthened by economic sovereignty. It was, perhaps even today, believed that to become truly viable a country had to rest on a strong economy.

It was also during this period that the importance of planning was emphasized. This has led to the announcement of a first five year plan in

1934. Yet, the plans implemented starting in 1934 through 1960 were far from being comprehensive. The first comprehensive development plan was introduced in 1963 and thereon the period of planned economy started.

3. State Economic Enterprises (SEEs)

3.1. Birth of SEEs & Objectives

In the 1930's, when the first Turkish State Economic Enterprise was established, there was hardly any industry in Turkey. The creation of a state enterprise had therefore strong promotional and educational objectives: ..to highlight the profits that would accrue to the country from industrialization, to demonstrate the workings of modern industry, and to recruit and train a pool of industrial staff and workers.

The Government began to invest heavily in industry, transportation, and to some degree, in agriculture, trade and services. These investments were carried out through state economic enterprises. Some of the SEE's that were established in this period are listed below.

The first SEE, Sumerbank, was founded in 1933. Its original functions included not only the creation of a number of factories, and mines, but also participation in or financial support of private ventures, training of workers and staff, and advice to the Ministry of the Economy on measures to promote industry. It established paper and textile mills, and provided the infrastructure needed for the electrification of the country.

Another state economic enterprise, Etibank, was established in 1935, and some of the Sumerbank's operations, such as development of mining and power were transferred to this SEE. Etibank initiated copper

production in 1938, and then lignite and chromite mining at various locations. It also was authorized to construct an aluminum smelter, a project which was realized some forty years later, with aid from the Soviet Union.

The Agricultural Bank (Ziraat Bankasi) was reorganized in 1924. It acquired SEE status in 1937. Its main purpose was, and still is, to finance agricultural projects at low interest rates, or subsidize them.

3.2. Performance and Problems of SEEs

A number of common problems have adversely affected the performance of all SEEs in varying degrees. These include excessive rigidity in management and pricing due to government controls. Interference by government, and frequent changes in management have made it difficult for SEEs to introduce programs for improving productivity. Further, most of the SEEs, particularly since the early 1970s have been bound by government decisions to restrain prices despite cost increases, while a few have enjoyed monopoly rights over competing imports enabling them to charge higher prices. Political pressures have also constrained many enterprises to keep redundant employees on their payrolls, while on the other hand, low scales of public employment made it easy for the private sector to attract away key managerial and technical staff. Some of these problems arise from the government's use of SEEs to achieve various social and political purposes, such as the development of backward areas, the provision of maximum employment, and the sale of essential goods and services at low prices. An explicit statement of the social and general economic objectives of individual SEEs should be made, and

specific subsidies be allocated to meet objectives to enable a clear assessment and improvement of the operational efficiency of the State Economic Enterprises.

It is clear that the public enterprise sector is a very important factor in the Turkish economy. SEEs generate about 8 percent of the gross domestic product (GDP), and provide around 10 percent of all non-agricultural wage employment.⁷ Their investment constitutes about 40 percent of total public sector investment, and was nearly a quarter of total fixed investment in 1977.⁸

TABLE 8
PROFIT AND LOSS ACCOUNT OF SEEs (1)
(in billions of current TL)

	1972	1975	1976	1977	1978
Expenditure	35.0	109.3	164.8	208.9	322.2
Wages and salaries	29.7	28.3	42.1	61.3	95.5
Other inputs		75.0	115.0	133.8	214.7
Depreciation and other provisions	5.3	6.0	7.7	13.7	12.0
Income	36.5	104.9	147.9	172.7	268.7
Sales revenue	34.4	92.2	132.8	155.9	264.8
Increase in stocks	2.1	12.0	15.1	16.8	3.9
Gross Profit(+)/Loss(-)	+1.5	-4.4	-16.9	-36.2	-53.5

(1) Operational State Economic Enterprises

Source: TURKEY, World Bank Country Study, Washington, D.C. 1980, p.65

As Table 8 also shows, the losses of SEEs have increased nearly thirteenfold, from TL 4.4 billion in 1975 to TL 53.5 billion in 1978. Such a poor financial performance reflected rapidly increasing costs in

an inflationary situation, accompanied by efforts to keep their prices unchanged, partly as an anti-inflationary measure.

SEEs are subject to a wide variety of interference and control from different sources, not only on policy questions, but also on day to day operations. The State Planning Organization (SPO), the council of Ministers, the Ministry of Finance, and local governments, the various Ministries dealing with economic issues, the political parties, and the Parliament all effect SEE decisions. In particular, overstaffing problems in the SEEs are traditionally traced to political pressures. It is noteworthy that between 1970-77, labor employed in the SEEs increased at an average rate of 11.1 percent per year. In the same period, industrial employment increased at 4.3 percent per year. During the same period administrative personnel employed in SEEs increased 4.5 percent per year.

TABLE 9

PROFITS OF SELECTED SEEs IN MINING & MANUFACTURING 1960-1972
(in millions of TL & in percent)

Company	profits before taxes				profits as a % of net equity 1972	ratio of equity to total assets 1972
	Average 1960-62	1967	1967-72	1972		
Turkish Coal Corp.	-46	1	-77	-62	-6.2	0.39
Turkish Petroleum corp.	66	152	283	385	19.1	0.51
Turkish Sugar Corp.	28	38	59	70	25.2	0.08
Sumerbank, Consolidated	63	167	111	209	8.0	0.51
Nitrogen Industry	-24	-48	-30	20	2.5	0.44
PETKIM	-	0	-2	75	11.4	0.56
Turkish Cement	7	39	20	22	-0.8	0.63
Turkish Iron & Steel	73	102	277	455	17.7	0.43
Machinery & Chemicals	22	60	55	12	9.8	0.53
Pulp & Paper Consolidated	25	44	42	-54	-8.2	0.23

Source : B. Walstedt, SME in a Mixed Economy, J.H.Press, 1980, p.111.

TABLE 10

STATE ECONOMIC ENTERPRISES
own resources available for meeting investment expenditures
TL million

	1978	1979	1980	1981	1982
Sumerbank	+599	-2,544	-4,404	-265	+2,483
Etibank	-375	-8,368	-1,929	-4,243	+4,860
Coal Mines	-7,489	-13,476	-11,747	-18,638	-20,697
Iron and Steel	-4,620	-2,995	-4,729	-7,521	-618
Cement	-472	-1,071	-857	+5,530	+5,457
Nitrogen Company	-1,179	-1,110	-2,161	+988	-204
Chemicals	-67	-2,514	-5,190	-3,988	+1,714
Paper	+629	-1,649	-7,849	-508	-3,408
Petroleum	+666	+766	+10,207	+30,118	+24,291
Sugar	-1,537	-5,744	+2,983	-822	-6,879
Turkish Airlines	-21	-257	-2,138	-3,670	+24,406
Maritime Bank	-1,081	-4,874	-4,286	-7,985	+166
Sea transports	-518	-2,138	+34	+513	-698
Railways	-3,212	-7,861	-18,705	-34,736	-33,589
PTT	+1,191	-2,620	+2,574	+11,089	+13,541
Soil Products office	+805	-4,382	+1,571	+2,612	+2,360
Meat and Fish	-254	+275	+125	+1,142	+312
Petrol Office	-84	-1,349	+877	+1,046	+163
Agricultural Equipment	-2,082	-7,788	-6,486	-77,624	-53,082
Milk Industry	-146	-159	-242	-366	+376
Tourism Bank	-156	-734	-532	-	-
Radio-Television	+489	-5	-96	+369	+1,102
Petro-Chemicals	+1,417	+3,272	+8,969	+6,100	+7,057
Others	+2,596	+8,421	+50,190	+58,035	+56,745
TOTAL PRODUCTIVE SEE'S	-15,301	-58,814	+6,084	-43,194	+25,858
Provincial Bank	-	-	-	-	-
Agricultural Bank	+87	-1,655	+142	-	-
Real Estate Bank	-49	-150	+256	-	-
Religious Found.Bank	-	-	-	-	-
Social Security Fund	+113	+239	+696	-	-
Pension Fund	+131	+123	+256	-	-
State Investment Bank	-	-1,148	-417	-	-
Others	-71	-520	-2,612	-	-
TOTAL OF FINAN.SEE'S	+211	-3,121	-1,679	-	-
OVERALL TOTAL	-15,090	-61,935	+4,404	-43,194	+25,858

Source : TURKEY, OECD Economic Surveys, 1982/83, April 1983, p.71.

Although SEEs were of crucial importance to the economic development of Turkey, its performance so far, nevertheless raises serious questions to its ability to function well, and the degree of emphasis it should be given in the future. Some of their more significant weaknesses can be summarized as follows:

(a) industrial development was pulled excessively in the direction of capital intensive import substitution.

(b) a self-perpetuating power group was born, linking bureaucrats, labor unions, and local politicians, that was far more powerful than any private capitalist power blocs operating in Turkey.

(c) The dualism between the state and private sectors introduced inflexibilities rather than mutually supportive structures capable of evolution and adaptation.

(d) The prices of the SEE products were set by the government, and were not allowed to be determined by the supply and demand in the marketplace.

(e) The State Economic Enterprises were neither well administered nor well managed, mainly due to the reasons listed below:

The administration of SEEs has been studied countless times by Turkish and foreign experts. The subject has been analyzed and discussed in all five year plans, and the annual reports of the Parliament, and in academic circles. Some of the most common problems are :

1. Ambiguity of objectives : The State Planning Organization (SPO) has a central responsibility for the formulation of objectives and investment programs for industrialization. These do not always rest on a solid foundation of technical and economic studies, and the projects are often politically inspired.

2. Political interference : The areas that the political interference can clearly be seen are collective bargaining and wage policy, price policy, and investment decisions, i.e., project location, choice of technology. Frequent changes in top management are also related to politics; when the political majority changes there is a wholesale replacement of top management. [According to one cabinet member, 90 percent of the top level managers of state enterprises were changed in 1978, when the power shifted from the Demirel to the Ecevit government. According to this official, the minority parties in particular have used management positions in SEEs as a channel for political propaganda.]¹⁰

3. Lack of direction and coordination at the top: there was no top organization to coordinate investments by various public agencies and settle priorities efficiently. Every SEE is subject to controls at four levels : The Ministry of Finance, the responsible Ministry (i.e., a SEE producing petroleum, petrochemicals,...is controlled by Ministry of Energy and Natural Resources), the State Planning Organization (SPO), and the High Control Board (HCB). Clearly, such splitting of responsibilities, and controls hamper the productivity and efficiency of these enterprises.

4. Lack of proper staff incentives: This applies particularly to top and middle management, and lack of incentive is frequently mentioned as the root cause of low efficiency in state enterprises. The principal handicaps are lower pay than the private sector, insecurity of tenure in the higher positions, and long delays before important decisions can be reached.

Since many of the above weaknesses have long been recognized why corrective actions have not been taken is a puzzling question. It is fair

to add, however, that several of the problems encountered are also characteristics of the operation of state economic enterprises in some highly developed economies.¹¹

TABLE 11
FINANCIAL ACCOUNTS OF THE OPERATIONAL
STATE ECONOMIC ENTERPRISES
(TL Billion)

	1979	1980	1981	1982
Sales Revenue	430	1,146	1,767	2,480
Total Expenditure	501	1,169	1,759	2,446
Wages and Salaries	143	238	314	378
Purchase of goods and Services	336	898	1,390	1,986
Depreciation	16	23	28	64
Other	6	10	27	18
Profit (or loss-) before taxes	-71	-23	8	34
Taxes	- 4	-15	-42	-60
Net Resources Available	-75	-38	-34	-26
Total Investment	172	459	616	633
Fixed Capital Investment	128	281	406	508
Stock Changes	44	178	210	125
Overall Financial Requirement	247	497	650	659
Financed by				
Depreciation	16	24	28	64
Budget Transfers	83	149	241	242
Central Bank credits	54	50	32	26
State Investment Bank	14	16	16	12
Foreign Borrowing (net)	62	67	97	64
Short term borrowing	18	191	236	251

Source : OECD Economic Surveys 1982-83 TURKEY, p.34

3.3. Conclusions

The recent years have seen the proposals of alternative reform programs. The suggestions in these programs, in principle, address issues such as :

(a) autonomy of enterprise protected against political interference; this in turn is a condition of full accountability on the part of management;

(b) reliance of the market mechanism supplemented by infant industry incentives;

(c) full accounting to the nation regarding operating performance, and financial and economic results in the state sector;

(d) elimination of dualism between private and public sectors.

This section can be concluded by indicating the essential conditions for a solution to the problems of the State Economic Enterprises mentioned above :

1. Measures must be developed and wherever possible, published- that will show the productivities and economic efficiencies of all state holdings, enterprises, plants, and work places.
2. Plants in which substantial overemployment exist must be banned from hiring additional personnel to replace those that leave.
3. Uneconomic plants should be closed. No SEE should be allowed to cite a social service function, such as retaining redundant workers on its payroll, as a reason for poor financial performance.
4. The pay scale and working conditions of workers and professional staff in SEEs should be competitive to those in the private sector.

The present government has taken some serious steps to eliminate some of the major problems that are discussed in this section. These are rather encouraging, and represent a radical departure from past practice. Since 1980, central government intervention has diminished and governmental transfers have decreased. The managers of most SEEs have been given responsibility for setting market oriented prices. Managers have been encouraged to implement necessary price increases without delay, and to reflect the cost of imports in their retail prices. Certain commodities which remain subject to price controls, such as coal, electricity, transportation and petroleum products, have been permitted substantial price increases. In addition to these, managerial salaries have been raised, and limits have been placed on new hiring.

The most important changes that have led to increased SEE profits have been higher prices for their products, and also closely related, tighter limits on their access to low interest bearing loans from the Treasury. The implementation of a more realistic pricing system following the pruning of subsidies for the products of State Economic Enterprises helped to curb Central Bank credits which had become one of the major sources of inflation. Most of the price controls imposed on SEE products were lifted to ensure the better functioning of the market mechanism. Most of the subsidies were abolished to allow market forces to play a greater role in resource allocation. Also, the changes in their organizational structure, and the provision of various pay incentives to top and middle level management helped to raise SEE productivity.

The first results of these new policies became apparant in the improved financial performance of the SEEs in 1981 and 1982. Table 12 presents the operating performance of the non-financial SEEs for the

periods indicated. Yet, the future effectiveness of these implemented policies can only be evaluated assuming that the political environment in Turkey remains stable. It is a very hard task to try to predict the outcome, and speculate the expected results of these policies in the years to come since political instability has been the single most important factor that has caused Turkey to experience the economic crises of the late 1970s, and early 1980.

TABLE 12
OPERATING PERFORMANCE OF THE NON-FINANCIAL SEEs
(billions of Turkish Liras)

	1978	1979	1980	1981	1982	1983
Net operating income loss(1)						
Unprofitables SEEs	(19.4)	(17.5)	(15.4)	(23.7)	(18.0)	(15.5)
Profitable SEEs	6.2	20.7	67.5	142.0	157.8	192.4
	[-13.2]	[3.1]	[52.0]	[118.3]	[138.8]	[176.9]
Less Government transfers	40.3	74.1	74.1	110.6	91.5	109.4
Net operating income (loss)	(53.5)	(71.0)	(23.1)	7.7	48.3	67.5

(1) before taxes

Source : Turkey, Kohn Leob Lehman Brothers, 1983

4. The State Planning Organization (SPO)

The State Planning Organization (SPO) was established by a "special law" in 1960, which stated that " economic, social, and cultural development should be based on a plan, and this plan should be carried out through the SPO ". It was widely believed, and still is, that "...planning is a principal means of escaping the stigma of underdevelopment."

The institutional structure of the State Planning Organization was designed to create a degree of independence and security for the technical experts who were to prepare plans, and the political authorities. Given the functions of this organization below, it was believed that the Turkish Development Plans for the post-1960 era would represent an important advance on the pre-war industrialization plans, which had affected only one sector of the economy, and were based on very simplistic methodological principles.

The law concerning the establishment of the SPO has set the functions of this Organization as follows :
13

a) to assist the government in determining economic and social objectives and policies, through compilation and evaluation of exhaustive data on all types of natural, human, and economic resources and potentials in the country;

b) to make recommendation to and act in a consultative capacity for the ministries, with a view to secure the coordination of ministerial activities relating to economic policy;

c) to prepare short, and long term plans for the realization of the objectives to be adopted by the government;

d) to advise on the improvement of the organization, and functioning of government offices and agencies as well as of local administrations concerned to assure successful execution of plans;

e) to follow up the implementation of the plans, evaluate it, and make revisions, where necessary;

f) to propose measures which will encourage and regulate the activities of the private sector in harmony with the goals and objectives of the plans.

5. Pre-1960 Period

The growth and development process of Turkey should be analyzed in two time periods; one pre-1960 period, and the other one being post-1960 period, since the latter period pursues the development strategy of the country in a less disruptive way than in the pre-1960 period. Economic planning was made a requirement in the 1960 Constitution, and was introduced in the form of a national development plan.

At this point, a brief analysis of the pre-1960 period is necessary before we start looking at the planned economy period.

Per capita GNP increased to \$165 in 1950 from \$105 in 1927, in¹⁴ current dollars. Modern industries, both public and private were established. Agricultural sector production increased gradually, due mostly to expansion of land under cultivation. However, the increase in cultivated land, and the lack of adequate communications between rural districts and cities limited rural-urban migration.

The policies implemented between 1923 through 1960 brought unbalanced growth; with most of the growth being concentrated in the west of the country. Only a small portion of the population benefited from the increases in urbanization, and the standard of living of the rural population deteriorated in the 1930s and 1940s. Yet, the 1950s marked an improvement in the distribution of agricultural products and in the share of the industry, due to a large scale construction to build the country's infrastructure, especially the highway network system.

Governments started to implement more liberal policies towards the private sector. In 1958 and 1959, following a trade boom, bottlenecks started to appear in the economy, since trade boom and bottlenecks are

concomitant with rapid growth; capital, which was already scarce, became even scarcer, the volume of exports and imports decreased, large government sector expenditures financed by borrowing from the Central Bank led to high rates of inflation. Price controls were imposed, and serious balance of payments deficits led to a stabilization program. Turkish lira (TL) was devaluated to ease the pressures on the export sector, and the foreign trade difficulties.

The devaluation of 1959 (around 140 percent from the 1957 level) did help to increase the volume of exports in that year, and with no major changes in the volume of imports, a reduction in the current account deficit was observed. Along with these, rescheduling of the repayments of Turkey's consolidated debt was agreed by the OECD countries at a concessionary interest rate (3 percent). Although temporary, this gave the government sufficient breathing space to increase import quotas, especially for goods essential for the development of the economy.

6. The Development Plan Period

6.1. Planning Objectives and Techniques

Each of Turkey's four Five-Year Development plans (and also the Fifth one which has started in early 1984) included more or less lengthy statements about its objectives. These statements were not always identical, but they have been nevertheless reasonably consistent in choosing a number of similar basic goals. These can be outlined briefly under five points.

The realization of high and sustained growth of national income has invariably the primary objective of planning. It was recogniz-

ed that the economy has attained a new dynamism during the 1950s. Also, it was believed that the annual GNP growth could be raised to 7 percent in real terms (the target of the first and the second plans) if the use of resources was planned in an effective, productive fashion.

Secondly, the planners bore in mind the severe balance of payments difficulties which Turkey had experienced during the late 1950s and made their elimination one of their objectives. The Fourth Plan, in particular, appeared to put more emphasis on the achievement of this goal than the earlier ones.

The creation of additional employment has been the third stated objective of the plans. Its importance obviously derives from the rapid growth of the population, and in particular, the demographic bulge of young adults who came into the labor market during the 1970s.

Fourthly, all four plans have included the achievement of a greater degree of social justice as one of their aims. The extension of social services and social security to all parts of the country and to all sections of the society have been accepted as an important target. Reform of the tax system, so as to shift a higher proportion of the tax burden onto the shoulders of the wealthy was urged in the First Plan,¹⁴ and repeated in the following ones.

The final and the related goal is the gradual elimination of regional disparities in income, education, and industrialization in particular, the direction of special development efforts to central, eastern, and south-eastern Turkey. This is perhaps the only goal in which all of the plans have emphasized as one of their major goals, yet have done nothing about it. In this respect the Plans are rather similar to the industrialization plans of the pre-war years.

Given these objectives, the planners have had to prepare detailed proposals for their achievement, with targets for the aggregate growth of national income over each plan period. These growth rates were planned to be attained through various "instrument variables" such as monetary, fiscal, and exchange rate policies.¹⁵ In summary, the planning process included three stages : a macro-economic stage, a sector stage, and the project stage. In the first of these, estimates were based on a Harrod-Domar growth model, which, after assuming a given target GNP growth rate and the marginal capital-output ratio, indicated the required volume of investment. The planners then estimated a plausible rate of domestic savings, and by subtracting this from the required investment, calculated the foreign capital requirement. The required level of public sector investment was similarly calculated as total investment minus expected private investment. An example can be constructed in regard to First Plan Targets :

Target GNP growth rate X (per cent per year)	Marginal capital output ratio	= Total investment = (savings) requirement	Expected domestic savings	Foreign + capital requirement
7.0	2.59	18.2	15.0	3.2

Having established the aggregate planned levels of output and investment, the SPO then determined their distribution between different sectors by means of a sectoral input-output table, giving total value added within each sector plus inputs from other sectors which would be required to reach a given level of output. The marginal capital-output ratio for each sector was then used to calculate the required

volume of investment. For the First Plan a 15 sector table was prepared ; by the time the Third Plan was being worked out, this had been extended to 37 sectors with 24 industrial subsectors. Finally, projects which would meet the sectoral targets established by the second stage were evaluated. In practice, each of these stages in the planning procedure involved constant trial and error; results from the sector stage were used to correct those of the macro-economic stage, and results of the project stage to correct those of both the earlier stages. ¹⁶

6.2. First & Second Plan Periods (1963-67 & 1968-72)

The First Five Year Plan was prepared in accordance with the method of planning in stages developed by Prof. J. Tinbergen. In this method, as was mentioned in the previous section, the economy is analyzed in three inter-related stages.

In the first stage magnitudes such as aggregate income, consumption, savings, investment, imports, and exports, which cover the whole economy, and the relationships among them, are studied. The aim is to draw up various development policies that seem appropriate for the economy, and to prepare the way for a selection among them. This is done by technical studies which specify the development targets on the one hand, and diagnose the factors limiting development on the other.

In the second stage, the conditions required for realizing the development targets defined in the first stage without causing an imbalance among various commodities should be investigated. Sectoral growth rates and investments are determined in this section. It is also in this stage where the first Input-Output table for the economy was drawn up. At this point of our analysis it is necessary to provide some

explanation as to how the Table was constructed. The following four paragraphs are drawn on the studies of Jan Tinbergen and Y. Kucuk.¹⁷

In the preparatory period prior to the first Plan, the problem of setting up balanced sectoral programs was among the most important policy decisions awaiting a solution, since during the pre-plan years, the bottlenecks in some sectors (cement, iron, steel) and the overproduction in certain others (textiles, transportation) had constituted serious problems.

First, the year 1959 was selected as the base year of the model. There are a number of reasons for this choice: the preparations for the Plan had started towards the end of 1961, the year 1958 had suffered from a 65 percent devaluation, and the year 1960 experienced a military coup (coup d'etat). Thus, it became necessary to choose 1959, a relatively normal year, as the base year. Then, Tinbergen proposed some simplifying assumptions for the I-O Table, recommending some cells be left empty. (see I-O Table for Turkey, Table 13)

The Table was constructed and filled for 20 sectors. The information for the construction of this Table was gathered by the State Planning Organization as a basis for sectoral programs. A decision was made as to what the inputs of a sector could be, and then the values were given accordingly. Most of the available data indicated quantities without any money values, and were evaluated according to the retail prices of a given city. This is the justification for the claim that the Table was prepared on the basis of buyers' prices.

The Table did have many shortcomings, such as the lack of independent consumption data. For this reason, to prepare it for the usage it was reduced by one fourth, to cover only fifteen sectors. It is

TABLE 13
INPUT-OUTPUT TABLE FOR TURKEY, 1959
(in million of dollars)

Quarterly Averages																				Total Supply		Total Demand		Excess Supply		Excess Demand		Public Expenditure		Private Expenditure		Total Expenditure		Total Income																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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clear that this is in principle inconsistent with the input-output model, which is an empirical general equilibrium model.

In the first two stages the problem of consistency is the most important. Attention is focused on the achievement of various balances. In the third stage the search for efficiency comes into the picture. When a selection is made among various projects, possibilities of using the scarcest factor in the most productive way are investigated.

The First Five Year Development Plan (FFYDP) was essentially planned within the framework described above. Along with the three stages it was designed to develop three models or techniques which consist of a growth model with one sector, an input-output model, and a method for project evaluation. A Harrod-Domar type macro-model, an open and static input-output model for 1959 with 15 industries, assuming some input coefficients be zero, and a project evaluation technique based on social profitability were taken as technical framework of the study.

The principal development target fixed by the First Plan was a 7 percent yearly increase in GNP. In order to attain this target the Plan envisaged devoting 18.3 percent of GNP to investments. The State Planning Organization estimated the value of incremental capital-output ratio¹⁸ (ICOR), for this Plan period as 2.6. Therefore, in order to realize an average development rate of 7 percent it was accepted that 18.2 percent, $[7 \times 2.6]$ of GNP had to be devoted to capital formation.¹⁹ With foreign aid about 4 percent of national income, savings had to be brought up to approximately 14 percent, up from 11 percent.²⁰

²¹
N. Kaldor pointed out that in developing countries there are two basic approaches to the policy of economic development:

1. to increase the incentives of the private sector for capital

formation,

2. and to create the necessary funds for capital accumulation through public compulsion..

The first approach stresses more on the importance of decentralized decision units, while the second one stresses the centralization of decisions through the accumulation of a greater proportion of investible funds in the governments' hands.

During the implementation of the First Plan, these two policy approaches seem to have altered.²² The Plan initially stressed the resource approach through public consumption, i.e., mainly taxation. An important reform in the tax system seemed necessary in order to put the Plan into effect. But later, due to pressures from the Parliament, the Government changed the Plan's proposals for financial equilibrium, and gave more emphasis to tax relief measures which would induce individuals to save more, and to take more risks through investments. However, given the results of the poor first year implementation, the government changed its attitude and shifted its ground towards the compulsory resource creation approach. The tax burden was somewhat increased to obtain the necessary funds. Thus, for most of the Plan period, government shifted its policies between the two approaches in search of a difficult compromise. Finally, by the end of the First Plan Period the Government committed itself to the incentive approach, and leaned towards welfare distribution through the price policy of SEEs.

6.3. Achievements of the First and the Second Plans

The growth and pattern of output during the two plan periods went a long way towards the achievement of the main objectives of the Plans. The Turkish economy became more modern and industrialized, and its dependence on foreign resources remained relatively small. In general, the current account deficit of the balance of payments did not exceed 2 percent of GNP. (A comparison of this 2 percent figure to pre-plan period shows us that in 1960, the current account deficit as a percentage of GNP was 1.96, 2.35 in 1961 and 3.1 in 1962) The growth of the economy accelerated substantially; the GDP growth rate was not far from the target, averaging 6.4 percent per year. The public sector expanded its share of investment to about 53 percent, compared with about 47 percent during the 1950s. Investment expenditure amounted to 16.2 percent of GDP during the Second Plan (compared with an 18.3 percent target) and to 19.3 percent of GDP during the Second Plan (compared with 21.3 percent). These percentages compared to pre-planned period show a marked increase. (Investment expenditures amounted to 14.8 percent of GDP during the 1958-62 period) Sectoral allocation of investment followed the Plan priorities with investment in industry representing 35 percent of total investment during the two Plan periods, in housing 21 percent, in transport 16 percent and investment in agriculture 14 percent. However, in both Plans the shares in investment in housing and industry exceeded their targets, while the share of investment in the social sector fell short of its target. The pattern of growth was substantially different from the expected one with significantly slower growth than expected in the sectors producing goods and faster

growth in services and housing. (For a summary of these conclusions, see Chart 1)

The first two Five-Year Plans were theoretically in favor of labor intensive techniques, but the development policies actually implemented resulted in the use of capital intensive techniques and created much less employment than had been expected. The use of capital intensive techniques was mostly due to the overvalued domestic relative to foreign currency which made the imports of capital goods and machinery less expensive. Although the distribution of income may have become more unequal due to the increases in urban employment and emigration of workers, social and health conditions improved substantially in this period (see chapter 1 section 2).

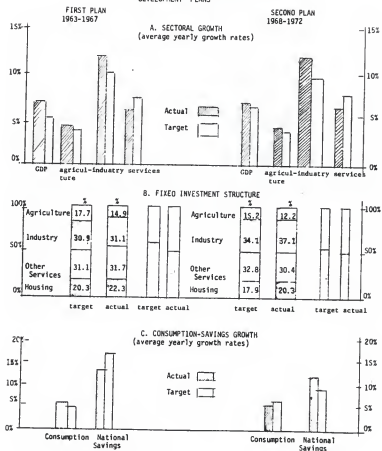
Although various governments have shown substantial concern for regional development, there still is much more to be done. The distribution of income among persons is considerably more unequal than among regions, and also deteriorated as a result of the pattern and distribution of growth.

TABLE 14
INCOME DISTRIBUTION, 1963-73

% of households	% of income		
	1963	1968	1973
Poorest	4.5	3.0	3.5
2nd 20 percent	8.5	7.0	8.0
3rd 20 percent	11.5	10.0	12.5
4th 20 percent	18.5	20.0	19.5
Richest 20 percent	57.5	60.0	56.5
Gini coefficient	0.55	0.56	0.51

Source: William Hale, The Political and Economic Development of Modern Turkey, (London: Croom Helm, 1981), p.137

CHART 1
TARGETS AND ACHIEVEMENTS OF THE FIRST AND SECOND
DEVELOPMENT PLANS



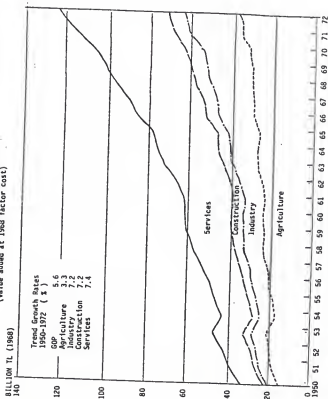
SOURCE : World Bank, TURKEY, 1975

Table 14 shows the percentage of total personal disposable income earned by the poorest 20 percent of households, proceeding up the scale in groups of 20 percent. The most important feature of the table immediately apparent is that income distribution is obviously lopsided. The richest 20 percent of households earned over half of the total income and were, individually, between 13 and 20 times better off than the poorest 20 percent.²³ Also a World Bank study concludes that the top 10 percent of the population receives at least 40 percent of income in Turkey, while the bottom 40 percent receives no more than 11.5 percent.²⁴

Rapid industrialization led to substantial structural changes in the economy : the share of agriculture in GDP (at current factor cost) declined from about 48 percent in 1950 to about 28 percent in 1972, the share of industry increased from 13 percent to 23 percent, and that of services from 39 percent to 49 percent (see Chart 2). The growth in both industry and manufacturing accelerated during the period of planned economy with industry up from 5.3 percent during 1950-62 to 11.3 percent during 1963-72, and manufacturing up from 7.6 percent during 1950-52 to 13.3 percent during 1963-72.²⁵ This rather remarkable growth in these two sectors was due to accelerated investment which was encouraged by generous incentives and by continued import substitution under heavy protection.

Also Table 16 presents the basic income distribution statistics emerging from the 1973 survey when the total distribution is disaggregated into regional subdistributions. The mean income in the three big cities (Istanbul, Ankara, Izmir) is 60 percent higher than the economy wide-average. "Given that non-agricultural incomes are underestimated in the survey, it is probable that mean income in Istanbul, Izmir and Ankara

CHART 2
GDP GROWTH AND STRUCTURAL CHANGES
(value added at 1968 factor cost)



Source: WORLD BANK Country Study, TURKEY March, 1975

is close to twice as high as economy-wide average income." ²⁶

TABLE 15
PER CAPITA INCOMES IN AGRICULTURE AND INDUSTRY
1950-1973 (TL Current prices)

	agriculture	industry	per capita K ratio
1950	306	930	3.04
1963	1,133	3,767	3.32
1968	1,449	5,668	3.91
1973	3,442	12,868	3.74

Source: Political Economy of Income Distribution, 1980 p.96

TABLE 16
INCOME DISTRIBUTION BY REGIONS
1973

Regions	no. of households	population shares(%)	Income shares	mean income	gini coefficient
Big cities	989,472	14.5	22.4	36,413	0.45
Central Anatolia	1,202,690	17.6	18.3	25,487	0.48
Black Sea	998,595	14.6	16.0	26,843	0.53
Aegean- Marmara	1,589,296	23.3	21.0	22,154	0.57
Mediterranean	1,045,062	15.3	13.3	21,422	0.57
Eastern Anatolia	1,009,843	14.8	10.0	16,670	0.51

Source: Structure of Income Inequality in Turkey, p.113

27

6.4. The Third Plan Period 1973-1977

The analysis of the major problems faced by the Turkish economy in the development strategy and in the Third Plan constitutes a progress from the previous plans and strategies in the sense that it is more

comprehensive and based on broader and more consistent statistical information. The planning techniques used in the preparation of the Third Plan also constitute a notable technical improvement in terms of model building and data collection.

The Third Plan macroeconomic projections are based on a Harrod-Domar model incorporating an input-output matrix for thirty seven sectors and sub-sectors, including twenty-four industrial subsectors. The matrix coefficients are derived from a detailed input-output analysis of the Turkish economy for 1967 and have been adjusted to account for technological changes between 1967 and 1972 and the 1970 devaluation. Starting from exogenous target values of GDP factor cost, level and distribution of exports, and the amount of the factor income, and net foreign capital for the terminal year, the model determines sectoral levels of production, investment allocation, public and private savings requirements and import requirements. The target growth rates of the model are based on the solutions of a fifteen year programming model used to bring out the implications of variations in strategy and to determine the long run development strategy for the country. Import substitution is obtained as the difference between import requirements of the targeted growth and the exogenous capacity to import (net foreign capital + net factor income + exports). Public savings is obtained as the residual difference between total investment and private and foreign savings.

The Third Plan Macroeconomic Targets

The macroeconomic targets of the Third Plan period represent the first stage of the long term objectives of Turkey. The target growth rate for the GDP averaged 7.9 percent per year. The total volume of fixed

investment in GDP was expected to increase by an average of 23.4 percent of the GDP to TL 291 billion in 1971 prices, which consisted of TL 158 billion of public fixed investment, TL 153 billion of private fixed investment and TL 10 billion of additional stocks. Also as Table 17 shows the Plan's savings target which implies a marginal savings ratio of 38 percent during this period. Domestic consumption was projected to rise at 6.3 percent per year (8 percent public and 5.9 percent private) corresponding to a 3.9 percent rise in per capita consumption per year. These targets originally represented a substantial acceleration of growth and effort with GNP rising from 7.1 percent per year in the Second Plan period to 7.9 percent in the Third Plan period, the national savings rate to GNP increasing from 18.2 percent to 23.3 percent, and fixed investments increasing from 19.3 percent to 23.4 percent of GDP.

The Plan emphasized policies that would help to increase the share of the industry in GDP to 26.8 percent in 1977 compared to 22.8 percent in 1972, and reduce the share of agriculture to 23.4 percent compared with 27.8 percent in 1972. To pursue this pattern of growth important changes were planned in the allocation of investment with large emphasis on industrial investment (45.4 percent of the total compared to 37.1 percent of the Second Plan).

To decrease the dependence on foreign resources, the Plan aimed at reducing gross public capital inflow from \$ 304 million in 1972 to \$ 130 million in 1977, and in fact, to achieve a negative net inflow in 1977. The Plan did not attain this target, though, due largely to unexpected four-fold increase in oil prices in 1973-1974. Commodity exports were expected to increase at 9.4 percent a year and commodity exports at 7.1 percent (compared to 13.4 percent and 6.4 percent respectively in the

Second Plan in constant prices). The structure of exports was assumed to change considerably, the share of industrial exports rising from 26.8 percent in 1972 to 42 percent in 1977. Workers' remittances, estimated by the Plan at \$ 600 million in 1977 (at 1971 prices), and higher net receipts from tourism would close the gap of current account balance.

TABLE 17
THIRD PLAN TARGETS 1/
(in percentage)

Sectoral growth rates :		Consumption growth :	
Agriculture	3.7	Public	8.0
Industry	11.2	Private	5.9
Construction	11.9	Total	6.3
Transport	8.2		
Housing	5.0	National Savings :	
Services	7.1	Yearly growth rate	13.6
GDP Factor Cost	7.5	As % of GNP	23.3
GDP market prices	7.9	Marginal savings rate	38.0
Fixed Investment			
Structure		Ownership	
Agriculture	11.7	Public	56.3
Industry	45.4	Private	43.7
Transport	14.5	Total	100.0
Housing	15.7	As % of GDP (average	
Social sector	6.4	in Plan period)	23.4
Other services	6.3		
Total	100.0		

Source: The Third Five Year Plan, SPO, Ankara:1973

1/ percentages given here refer to yearly growth rates unless otherwise noted.

While the Third Plan aimed at reaching full-employment as a long term goal, the pattern of development was expected to lead to a deterioration of the employment situation in the urban areas. The Plan emphasized investment in high growth and relatively less labor-intensive industries; the consequent increase in the level of unemployment in the

medium-term was seen and accepted as a price worth paying for immediate rapid growth with full-employment expected after 1995. Thus, the State Planning Organization expected the level of disguised and open unemployment outside agriculture to grow from 14.5 percent of the non-agricultural labor force in 1973 to 14.9 percent in 1977, and 15.4 percent in 1987.

The policies proposed in the Third Plan aimed at reaching its targets while maintaining price stability. To counteract short term fluctuations in growth, maintaining flexibility in the level of public expenditure and in the determination of tax rates were proposed.

To accelerate the growth of industrial exports, policies were adopted to simplify tax rebate procedures and to help widen the foreign markets for these products. Import requirements of the proposed development targets were found to exceed the independently projected foreign exchange receipts. Consequently, a large volume of import substitution was advocated in the Third Plan, supplemented by a policy of import restrictions and controls that aim at conserving foreign exchange while avoiding shortages by timely import of necessary raw material and capital goods.

The Third Plan development strategy constitutes the first stage of a long term strategy for the period 1973-95 and a continuation of the strategy of the two previous plans. The basic objective to be reached by 1995, when Turkey expects to become a full member of the European Common Market, is to raise the standard of living to the level prevailing in Italy in 1970s through accelerated industrialization in a mixed economic system while decreasing dependence on foreign capital. The achievements

of the long term targets is expected to resolve the major problems facing the economy. These problems are identified as rapid population increase (about 2.5 percent increase per year) and its scattered settlement, the large volume of disguised unemployment, the unbalanced distribution of income, the insufficiency of social security coverage, limited and inadequate health and education facilities, deficiencies in domestic resource mobilization and the credit system, an inadequate production structure and technology, growing foreign trade deficits, a costly and slow functioning public administration, and the obligations imposed by the future EEC (European Economic Community) membership.

It can be said that by the end of 1977, the Third Plan period, Turkey has reached the status of a middle income developing country with a per capita income of about \$ 1,100 and a relatively modern, diversified and a complex production structure. The public sector has continued to play a major role in economic and social development since the beginning of the planning era. It has accounted for 50 to 55 percent of total investment during 1963-77, but its share in manufacturing investment increased substantially, to about 49 percent of total in 1977. The private sector has also shown considerable dynamism and flexibility.

The main goal of the development strategy of Turkey has been to seek a rapid transformation of the productive structure involving the development of an indigenous, modern industrial sector, and the modernization of the agricultural sector. This was correctly perceived as the appropriate way to transfer technology in the initial stages, and later on, as the economy grew more sophisticated and developed its capabilities in terms of skilled manpower, to internalize the process of technological growth.

It wouldn't be wrong to conclude that in general terms these objectives have been achieved. High rates of public and private investment, with emphasis on capital intensive and technologically advanced industries, have led to the emergence of a modern industrial sector, as evidenced by mechanization and use of improved inputs.

Yet, as Table 18 indicates, a comparison of the economic structure of Turkey with that of an average large developing country with a per capita income and population similar to Turkey shows that structural change has not preceeded entirely as would be expected. The share of the agricultural output in GDP is higher than would be expected and that of the industrial output lower. Table 17 is rather important, for conclusions about the implemented policies can be made and relevant policy proposals for the future development strategies can be derived. A low export orientation, largely due to the overvalued domestic currency, and the import substituting strategy followed by the government together with an import level relative to GDP which is close to the international average, which points out the vulnerability of the balance of payments and the need for export development. Also a relatively high level of investment relative to GDP, accompanied by a ratio of domestic savings to GDP considerably below the expected level, which indicates a tendency towards a relatively high level of external borrowing and domestic inflationary pressures stemming from excess aggregate demand. The relatively high proportion of the labor force in agriculture reflects the existence of disguised unemployment and the need for accelerated job creation in other sectors, particularly industry.

During 1973, the first year of the Third Plan period GNP increased by 5.3 percent despite a decline in agricultural output. The value added

in industry increased by 11.5 percent. The imports increased by 34 percent but exports increasing by 49 percent and workers' remittances by 60 percent created a rather comfortable balance of payments situation. The external debt was small and on rather favorable terms with a good maturity structure. The SEEs had a small operating surplus, and the budget deficit was around one percent of GDP. However, pressure on prices began to emerge, and the GDP deflator increased by 21.6 percent compared to an increase of 13.7 percent in 1972.

TABLE 18
COMPARISON OF ECONOMIC STRUCTURE WITH INTERNATIONAL AVERAGE
(percent of GDP)

	International Average/1	Turkey/3	Deviation
Primary Output	16.4	29.9	+13.5
Industrial Output	34.1	22.4	-11.7
Gross Domestic Savings	24.9	17.3	-7.6
Gross Domestic Investment	22.7	25.5	+2.8
Exports	16.1	4.1	-12.0
Primary Exports	6.2	1.9	-4.3
Manufactured Exports	5.5	1.2	-4.3
Imports	14.2	12.4	-1.8
Primary Employment/2	30.7	57.0	+26.3
Industrial Employment/2	32.8	14.2	-18.6

1/ derived from development patterns analyzed by Chenery and Syrquin PATTERNS OF DEVELOPMENT 1950-1970, Oxford University Press 1975. These figures are for large countries sample, and represent expected values for a country with GNP per capita of \$ 700 (1964 dollars), population 40 million and average capital inflow of 2 percent of GDP. Turkey's per capita GNP in 1977 was \$ 705 in 1964 US dollars.

2/as percent of labor force

3/Estimates for 1977

In the years following 1973, this trend started to reverse itself. There were two major relevant developments in the international economic environment during 1974-77 which adversely effected Turkey : (1) the

sharp increase in oil prices in 1974 and (2) the simultaneous existence of recession and inflation, and rising unemployment in the industrial countries. The domestic policy responses to these developments worsened the situation by postponing the policies needed for adjustment.

TABLE 19
SELECTED ECONOMIC INDICATORS, 1970-77

	1970-73	1974-77	1977
Growth Rates(constant prices)			
GDP	6.2	7.6	4.4
Investment	10.0	14.7	6.9
Public Investment	4.0	18.4	13.2
Consumption	5.8	7.7	5.5
Public Consumption	6.4	11.4	17.0
Growth Rates(current prices)			
Merchandise Exports	25.1	7.4	-10.6
Merchandise Imports	27.0	29.1	13.0
Workers' Remittances	70.2	-4.5	-0.1
Rate of Inflation(GDP deflator)	16.9	21.5	24.8
Rate of Increase in Money Supply	18.3	31.4	39.0
Budget Deficit(percent of GNP)	1.8	2.9	6.1
Workers Going Abroad(total number)	439,066	49,252	14,064
Average Current A/C Balance(\$ million)	109.0	-2117.0	-3572.0

Source : Policies and Prospects for Growth, W.B. 1980

The worsening of the international environment was met by an acceleration of GDP growth, through the acceleration of the growth of investment and consumption, led by the public sector. The growth rate of public investment in 1974-1977 was four times higher than in 1970-73; the growth rate of public consumption nearly doubled. The budget deficit as percentage of GDP increased; the rate of increase in money supply accelerated to finance the expenditures, and the rate of inflation started to increase.

The above mentioned developments were accompanied by unfavorable

developments in the balance of payments, partly due to world recession and to overvalued Lira relative to foreign currencies. Exports declined in volume and marked only a minor increase in terms of value while imports continued to increase rapidly. During 1974-77 the import growth rate was about four times the growth rate of exports. Due to the inflationary environment a large proportion of the output produced were absorbed domestically. Similarly, the tremendous increase in the value of imports was due to increase in world prices, especially oil, and to maintain the level of the imported inputs needed to feed the expanding economy.

This time period also marked a rather steep decline in workers' remittances, which currently finances about 30 percent of Turkey's imports. This decline was partly by the worsening recession in Western Europe, which reduced the demand for employment of Turkish workers. There was a worsening of the terms of trade accompanied by attempts to keep the volume of imports in line with the growing needs of the economy. The government insisted on maintaining the growing domestic boom through external borrowing, mainly short-term. The motives for preferring short-term loans will be discussed in the following chapter. Of the total increase in debt outstanding of \$ 8.9 billion between 1972-77 nearly 75 percent of it was short-term. Short-term external debt which was \$ 19 million in 1972, and \$ 1.4 billion in 1975 increased to \$ 6.6 billion at the end of 1977. There are a number reasons for this rapid increase in external debt. The first one to be noted here is the enormous jump in world oil prices which has affected Turkey's oil import bill adversely. Oil imports amounted to \$ 52 million in 1960, \$ 67 million in 1970, \$ 1,082 million in 1975, \$ 2,759 million in 1978 and \$ 3,348 million in

1979. Also, it appears that Turkey has borrowed unwisely, using some of the borrowed resources to finance consumption and investments of dubious value, rather than to strengthen its productive potential. We could perhaps add the overeagerness of banks to lend as one other reason since this has allowed the borrowing governments to postpone necessary adjustments. Lastly, the volume of the floating interest debt increased, together with the sharp rise in its cost. As a result, a crisis of confidence developed, the inflow of external capital dried up, and the boom collapsed by mid 1977, leaving behind much to be resolved before the economy can be reestablished on a path of stable and reasonably rapid growth.

6.5. The Fourth Plan Period 1978-1982

As the Fourth Plan started Turkey found itself in an economic crisis involving severe balance of payments and external debt problems, a stagnated economy, and increasing idle capacity due to decreased imported inputs caused by foreign exchange scarcity. In early 1978, the government announced a stabilization program which formed the basis of a Standby Agreement with IMF in April. The program was aimed at reducing the rate of inflation by reducing the public sector deficit and improving the balance of payments. SEE prices were increased, interest rates were raised, and the exchange rate was adjusted through the devaluation of domestic currency. A tax reform bill was sent to Congress. Also, efforts were started to reach agreements with foreign creditors to reschedule debt repayment obligations and increase foreign exchange reserves.

Despite the measures taken, most of the goals, it can be said, were not realized. The progress in the negotiations for rescheduling part of

the large commercial and banking short term debt were slower than anticipated, and resulted in a long delay in the availability of the new loans which have been expected by the government to materialize in the second half of 1978. This aggravated the already very tight foreign exchange situation, increased domestic shortages of imported inputs and fueled the already high inflation. The SEE operating deficits marked an increase, strengthened the inflationary forces and adversely affected the international confidence.

In early 1979, the government implemented another stabilization program. The objectives, to reduce inflationary pressures, to ease balance of payments problems, and increase real economic growth, were similar to those of 1978 program. Interest rates for both deposits and lending were raised substantially. The Turkish lira was devalued, and a limited multiple exchange rate system was introduced. A rate of TL 47.00=\$1.00 applied to all transactions except for oil and fertilizer imports and primary goods exports for which the rate was TL35.00=\$1.00. The new laws passed permitted Turkish industrial exporters to retain 50 percent of their foreign exchange earnings and either to use it to finance their own import requirements or transfer it to other industrialists at freely determined prices. This, of course, created new problems to be dealt with, such as the creation of a new parallel market, legal in a limited sense, in respect of foreign exchange receipts from manufactured and mineral exports. Since many industrialists already deal in the black market, this "freely determined price" corresponds roughly with the black market exchange rate. The exchange rate received by industrial exporters is thus in effect elevated to a level roughly half-way between the official rate and the black market rate. "The value to

the exporter of that part of his retained foreign exchange which is used for his own imports must also at least equal its black market value--if not he would sell it. For this reason, the degree of incentive given to exporters by the retention scheme is independent of their own export-to-import ratios (provided that they can, where necessary, freely procure²⁹ supplementary foreign exchange at the black market rate)". Nevertheless, similar to one in 1978, the 1979 Stabilization program did not reach to its goals of reducing inflationary pressures, easing balance of payments problems, and increasing real economic growth for various reasons, mostly due to political and social instability.

The early years of the Fourth Development Period (1978-82) coincides with large scale political and economic disturbances that led Turkish authorities to review the system, and to change the pattern of past policies in order to attain a stable level of economic as well as social and political environment. A rescue package was introduced by the government in January 1980, which led to the implementation of a new stabilization program. The economic activities following this period will be analyzed in the following chapters, since the period starting Jan. 24, 1980 and onwards can be considered as the period of restructuring the Turkish economy.

Before concluding this chapter, it briefly needs to be mentioned why the implementation of a new program was inevitable.

There are several reasons why Turkey began implementing a new economic program which placed greater reliance on market forces. The economy experienced an extreme delay in responding and adopting to the various oil price shocks from 1973 onwards. Price controls were everywhere; black market and the doubling prices (over 1973-79 period) were

the rule. Ill-advised exchange rate policies had created a very difficult balance of payments situation. " In an open market economy an inflationary economic policy followed by a fixed exchange rate policy will always lead to a deficit in the balance of payments; a situation which is followed by attempts to meet the balance of payments' deficits first with existing reserves, then by official or private foreign indebtedness."³⁰

Internally, inflation had soared to over 100 percent per annum, and the savings in the banking system were rapidly eroding because of the unrealistically low fixed interest rates that were offered. (The maximum interest rate that banks can offer on savings deposits was set by Government. One may compare this with " Regulation Q " that is still in effect in the United States.) In addition to the economic malaise, anarchy fueled by external and internal sources was taking the lives of up to 20 people per day.

6.6. The Stabilization Program; " Jan. 80 Measures "

Faced with all these serious problems at the beginning of 1980, Turkey launched a comprehensive stabilization program. The main philosophy behind these measures was to depart from a regulated, controlled, and closed economy to one where market forces and foreign competition could play major roles.

The primary objectives were to stop the runaway inflation and to eliminate shortages.

The following policies were pursued in the realization of these targets:

1. A flexible exchange rate policy was adopted in order to attract more remittances from Turkish workers abroad, and to improve the competitive-

ness of its products in the international markets.

2. A more realistic pricing system was implemented following the pruning of subsidies for the products of State Economic Enterprises. This policy helped to curb the Central Bank credits which had become one of the major sources of inflation. Although not all, most of the price controls in the domestic market were lifted to ensure better functioning of the market mechanism.

3. A realistic interest rate policy was introduced in order to increase domestic savings and to improve the distribution of domestic resources.

4. By means of strict money and credit policy, the extraordinary surge in domestic demand was curbed, Increases in the money supply were controlled, and more credit was directed to export oriented sectors.

5. Additional measures were taken to increase exports, promote tourism, and facilitate the flow of foreign capital into the country.

It becomes clear that the short and the medium term policies are mainly designed to reduce the rate of inflation, increase exports, eliminate foreign exchange shortages, and bring the foreign trade balance into equilibrium so that economic growth can be realized. In the following chapter, we attempt to analyze the inflationary dynamics in Turkey, and test whether the Government's extensively used monetary policies would have the expected effect of reducing the upward pressure on prices.

NOTES

1. The full text of this speech appears in A. Gunduz Okcun, Turkish Economic Congress, 1923 Izmir, (Ankara University Political Science Faculty, 1968), pp.243-56.
2. Bertil Walstedt, State Manufacturing Enterprise in a Mixed Economy: The Turkish Case; published for the World Bank, (John Hopkins University Press: Baltimore, Maryland, 1980), p.63.
3. Korel Goymen, The Nature and Practice of Turkish Etatism. Ph.D. Dissertation, University of Leeds, 1973. p.192, citing Walter F. Weiker, Free Party of 1930 in Turkey, (Ph.D. Dissertation, Princeton University, 1962) pp.231-33.
4. Goymen, Turkish Etatism, pp.201-2.
5. Industrial report submitted to National Assembly in 1933 by the "Ali Iktisat Meclisi", (The Supreme Economic Council), cited by Goymen, Turkish Etatism, p. 215.
6. Ibid, p.297.
7. Turkey: Policies and Prospects for Growth, The World Bank Publications Unit (Washington, D.C., March 1980), p.64.
8. Ibid, p.64.
9. Ibid, p.66.
10. Bertil Walstedt, State Manufacturing Enterprise in a Mixed Economy, p.190.
11. Ibid, p.192.
12. O.N. Torun, The Establishment and the Structure of the SPO, Economic Research Division, State Investment Bank, (Middle East Technical University: Ankara, 1967), p.70.
13. Law no.91. Article 2, September 30, 1960, cited in Introducing Turkey's State Planning Organization, SPO., Publication No.3, Ankara: 1963.
14. The Government of 1959 invited Prof. Jan Tinbergen to Turkey to start preliminary studies for a development plan. Tinbergen, later played an important role in the preparation of the First Five Year Plan. See N. Torun, The Establishment and the Structure of SPO, p.46.
15. The term "instrument variables" is used by Wayne Nafziger in The Economics of Developing Countries, (California: Wadsworth

Publishing Co., 1984), p.456. For more information on planning goals and instruments, see pp.455-56.

16. For more information, one should refer to "Methodological Background of the Plan", by J. Tinbergen in Planning in Turkey, edited by S. Ilkin, and E. Inanc, (Middle Eastern Technical University Publications No:9, Ankara:1967).

17. Jan Tinbergen, "Methodological Background of the Plan", p.73, Y. Kucuk, "The Sectoral Programming in the Plan", in Planning in Turkey, pp. 97-100.

18. K. Bulutoglu, "Financing Turkey's Development Plan", in Planning in Turkey, p.182.

19. This is an application of Harrod-Domar growth model, shows the relation between the rate of savings (s), the rate of increase in population (n), the increase of national product per unit of investment (ICOR), and the increase of per capita income (g). $g = s(ICOR) - n$. Ibid, p.183

20. Jan Tinbergen, "Methodological Background of the Plan" in Planning in Turkey, p.72.

21. K. Bulutoglu, "Financing Turkey's Development Plan" in Planning in Turkey, p.200, citing N. Kaldor, "Taxation for Economic Development", The Journal of Modern African Studies, 1964, Vol.I n.1, pp.7-24.

22. Ibid, pp.200-01.

23. William Hale, The Political and Economic Development of Modern Turkey, (London: Croom Helm Ltd, 1981), p.137.

24. Turkey: Prospects and Problems, pp. 11-2.

25. Kemal Dervis, Sherman Robinson, "The Structure of Income Equality in Turkey 1950-1973" in The Political Economy of Income Distribution in Turkey, (Holmes-Meier Publications, N.Y.1980), p.113.

26. Turkey: Prospects and Problems, pp.10-11.

27. The statistics in this section are obtained from The Third Five Year Plan, 1973-77, State Planning Organization (Ankara:1973).

28. William Hale, The Political and Economic Development of Modern Turkey, Table 13.7, p.243.

29. Turkey: Policies and Prospects for Growth, p.92.

30. Kemal Kurdas, Reforming the Turkish Exchange System, (Istanbul:Meban Brokerage & Finance Corp. Press, 1979), p.71.1

PART II

ECONOMIC STABILIZATION
POLICIES

CHAPTER III

BEHAVIOR OF TURKISH INFLATION

1. History of Turkish Inflation

Inflation has been one of the major problems of the Turkish economy in the postwar period, especially during the last two decades. Although inflation rates were lower than in some Latin American countries, during the last few years they have reached record levels. What is more important though, is the fact that they have been continuously accelerating in the last decade. After relatively low levels of inflation in the early 1950s the inflation rate hit the 25 percent level in 1958. Following a successful stabilization program, price stability was regained. Economic growth during the 1960s was accompanied by reasonable price stability, with no major jumps being observed in the rate of inflation. In the early 1970s, however, inflationary pressures began to emerge, and prices rose by 14 percent a year between 1970-72. Following the oil price increases in 1973, the rate of inflation intensified, so that the annual average rate of growth during 1973-77, the Third Plan years, was 20 percent. By mid-1977 prices began to escalate again reaching 100 percent in 1980. Another stabilization program implemented during the same year succeeded in reducing this rate down to 35.2 percent in 1981, 28.4 in 1982, and 32.8 percent in 1983 (and in 1984 this rate is expected to reach 38-40 percent level).

The major factors behind the Turkish inflation, some of them inter-related, appear to be the following: increased deficit financing by the

public sector; increase in private demand with rising incomes with no increase in aggregate supply; rapid and uncontrolled growth of money supply and credit; an increase in money wages (initially in response to rising prices, but subsequently resulting in price increases); rising import prices due to world inflation; and the devaluation of the Turkish Lira. The foreign exchange bottlenecks, followed by a reduction in the volume of imports have also caused supply shortages, and have exacerbated the pressure on prices. Along with these, we can also include the sudden increase in agricultural support prices which appear to be political in origin; the weather conditions which influence agricultural prices; and the enormous jump in oil prices during 1974 which was financed by SEE deficits, adding several billion Turkish Liras to the money supply.

The movement of labor from low productivity agriculture to high productivity industry and services is an integral part of the growth process in a developing economy. There is evidence, however, that intersectoral productivity differences have been overstated in Turkey, thereby leading to an overestimation of overall productivity growth.² The overestimation of productivity caused an increase in labor's wage demands. With no real change in productivity, higher wages served as a cost-push pressure upon the economy. The labor force in Turkey is well organized, especially in industrial and manufacturing sectors. During the previous inflationary period, large increases in wages have been negotiated by the unions to keep them abreast of inflation. However, during 1979, it is well known that biennial negotiations for wage increases of 120 to 150 percent were being discussed while the inflation was running at a rate of 60 to 70 percent.

Also, the role of public sector deficits in generating and maintaining inflationary pressures cannot be stressed enough. Within the public sector the State Economic Enterprises have played a major role in generating these deficits. The undertaking of ambitious investment programs without due regard to the financial situation of the SEEs, the policy of keeping prices low in the face of input and wage costs in an effort to exert a downward pressure on prices, and the lack of efforts to improve efficiency and reduce costs in an environment where operating losses can be met by borrowing, have all contributed to large deficits. These deficits increased to substantial amounts during 1978 and 1979, and were financed primarily in either direct or indirect form from the Central Bank. (Financing these deficits was done primarily through Central Bank borrowing. In 1974 some 74 percent of the consolidated budget deficit, and 76 percent in 1978 was financed in this way, amounting to TL 31.3 billion in 1977, and TL 44.2 billion in 1978. The balance has been financed mostly through tax free domestic bond issues to commercial banks, which are allowed to hold them in partial fulfillment of their reserve and liquidity requirements³).

Another public sector institution which has contributed to the inflation is the system of agricultural support policies. Support prices for a number of agricultural commodities are often set on income policy grounds. The purchases made by the concerned organizations are sold, usually at subsidized prices to urban consumers (e.g. cereals, sugar, meat and tobacco). In an inflationary environment large increases in support prices are granted to "protect" the standard of living of the farmers, while prices for urban consumers are attempted to be kept

stable through larger subsidies.

2. The Relationship between Money Supply and Prices

Inflation studies in LDCs have been based on two different approaches: the monetarist and the structuralist approach. The naive monetarist model was first formulated and tested by Harberger(1963) in "Dynamics of Inflation in Chile". Later, Vogel [1974] and Sheeley⁴ [1980] tested the naive monetarist model for Latin American countries. The results of their studies have shown that there is almost one to one correspondance between the growth of the money supply and the inflation rate. A study conducted by the World Bank for Turkey[1980]⁵ has yielded rather similar results :

The World Bank estimated the dynamic impact of 1 percent change in the money supply on the price level for an 18 month period. This relationship is shown on Table 20 . From this Table we observe that a 1 percent increase in the money supply leads to a .31 percent increase in prices during the same month. In three months the cumulative effect reaches .67 percent. Thus within three months, half of the increase in the money supply is already incorporated in the price level. Within 12 months the increase in prices reaches to 1.39 percent. Thus, the effect of the increase in money supply leads to a more than 1 percent increase in prices within one year.

However, during the following year, it leads to a deflationary pressure on prices, and after 18 months we observe that the cumulative effect of a 1 percent increase in money supply on prices is equal to 1.01 percent, or there appears to be an exact one to one relationship

between the money supply and prices, when money supply is increased exogenously.

TABLE 20
THE IMPACT OF A 1 PERCENT RISE IN MONEY SUPPLY

<u>months after</u>	<u>marginal impact</u>	<u>cumulative impact</u>
0	.31	.31
1	.10	.41
2	.07	.48
3	.19	.67
4	.15	.82
5	.12	.94
6	.03	.97
7	.16	1.13
8	.18	1.31
9	-.13	1.18
10	.10	1.28
11	-.03	1.25
12	.14	1.39
13	.02	1.41
14	-.10	1.31
15	-.10	1.21
16	-.01	1.20
17	-.09	1.11
18	-.10	1.01

Turkey, 1980. The World Bank Country Study, 1980. p.185

By using the same technical framework, Kizilyali [1978]⁶ tested the Harberger equation and obtained similar coefficients to those observed in Latin American studies. The success of the naive monetarist model in explaining the rate of inflation both in Turkey and in other LDCs has led to a crude form of monetarism where policy prescriptions are based primarily on the control of the money supply. Furthermore, the strong relationship between the money supply and the inflation rate has led to the minimization of the costs of monetary stabilization policies.

3. The Monetarist Model

All inflation studies start from the following basic monetarist specification first used by Harberger[1963].

$$\dot{P}_t = a_0 + a_1 \dot{M}_t + a_2 \dot{M}_{t-1} - a_3 \dot{Y}_t + a_4 \dot{A}_t \quad (1)$$

(.) = change in ln. i.e., growth rates

P = aggregate price index

M = money supply

Y = real output

A = proxy for the cost of holding money

t = time

Here, the equation claims that the changes in the money supply cause changes in prices, given the rate of growth of output. Price (P), output (Y) and money supply (M) are the implicit GDP deflator, real GDP and M2, respectively; and where M2 consists of currency, demand and time deposits.

In Turkey nominal interest rates have changed too infrequently to be used as the measure of the cost of holding money. For similar reasons most studies in LDCs have used past changes in the rate of inflation as a proxy for the cost of holding money. In this analysis, the cost of holding money (A) will be defined as $(P_t - P_{t-1})$ where P_t is the expected inflation. The index of import prices will also be included in the model since studies which have used import prices have found it to be significant even when used with money supply variables.

The import prices used in this study are the domestic prices of

imports, including the import tax, which are the domestic user cost of
⁷
 imports .

$$IMP_d = (IMP_e) (1+tx) \quad (2)$$

where IMP_d = price index of imports, in dollars
 e = the exchange rate (US\$/TL)
 tx = average tax rate for imports

4. The Data

The annual data for the GDP deflator and GDP are obtained from the State Institute of Statistics, National Income series. The expected inflation is based on the surveys of the Istanbul Consumer Price series, collected by the Chambers of Commerce, and published in the various SIS monthly bulletins. The data on money supply is from the Monthly Bulletin of the Central Bank of January 1982. Finally, the import price index is obtained from World Bank sources up to 1968 and from SIS 1968 to 1980. The import tax rate is the ratio of import taxes from GNP accounts divided by the value of imports in Turkish Liras from the SIS monthly bulletin. The study covers the period from 1950 to 1980. A list of the data can be found at the end of the chapter.

5. Empirical Results & Conclusions

Here, the naive monetarist model specified in equation (1) is tested. This equation is estimated with and without the import price variable and the numbers in parenthesis indicate t-statistics. The dot over the variable indicates that it is the growth rate.

$$\dot{P}_t = -7.290 + 1.028\dot{M}_t - 0.041\dot{M}_{t-1} - 0.012\dot{Y}_t + 0.006\dot{A}_t \quad (1)$$

(1.81) (4.81) (0.19) (0.78) (0.39)

$$R^2 = 0.68 \quad D.W. = 1.59 \quad F = 17.45$$

$$\dot{P}_t = -6.48 + 0.959\dot{M}_t - 0.164\dot{M}_{t-1} + 0.014\dot{Y}_t + 0.0007\dot{A}_t + 0.176\dot{IMP}_t \quad (2)$$

(2.13) (5.85) (1.00) (1.19) (0.06) (4.16)

$$R^2 = 0.82 \quad D.W. = 1.88 \quad F = 20.81$$

The results in terms of explained variance indicate a significant relationship. (Kizilyali tested a similar model for the period 1950-74. For a comparison of results, see note 6).

The results show that the coefficient of the current money supply variable is 1.02, while the coefficient of the lagged money supply variable as well as the coefficients of income and the proxy for the cost of holding money are statistically insignificant.

As is the usual case in most developing countries, import prices do play a significant role in the determination of the domestic price level. A comparison of the equations (1) and (2) indicate that import price changes have direct effects on the inflation rate, and this effect does not work through the money supply. The inclusion of the variable IMP does not change the coefficients of the money supply, $M2$, indicating that the direct link between money supply and import prices is not strong.

We now test another model where the money supply is lagged for two years in an attempt to find out whether these lagged variables have any

impact on the rate of inflation.

$$\begin{aligned} \dot{P}_t = & -9.029 + 0.9937\dot{M}_t - 0.126\dot{M}_{t-1} - 0.224\dot{M}_{t-2} \quad (3) \\ & (2.14) \quad (4.34) \quad (0.55) \quad (0.73) \end{aligned}$$

$$\begin{aligned} &^2 \\ R = & 0.68 \quad D.W.= 1.77 \quad F= 17.49 \end{aligned}$$

Here we observe that not only the coefficients of the lagged money supply for the years 1 and 2 are both insignificant, but also their inclusion in the model does not change the coefficient of the current money supply. We get a better fit, a higher R^2 and increased F-value by dropping the lagged money supply variables, and including the import growth variable.

$$\begin{aligned} \dot{P}_t = & -8.50 + 0.892\dot{M}_t + 0.170\dot{IMP}_t \quad (4) \\ & (3.09) \quad (7.65) \quad (4.17) \end{aligned}$$

$$\begin{aligned} &^2 \\ R = & 0.80 \quad D.W.=1.61 \quad F=53.02 \end{aligned}$$

The implications of the models tested here are very clear. First we observe that the coefficient of the current money supply variable is very consistent. The dropping or the inclusion of one or more variables does not cause a large change of the slope of money supply. There is almost a one to one relationship between the money supply and the inflation rate. That is, the changes in the money supply more or less complete their effect within one year, and are almost fully reflected in price changes.(F-tests conducted in an attempt to verify this relationship also support this conclusion). Thus, our findings are

consistent with the classical theory, and support the hypothesis that inflation in Turkey is to a large extent a monetary phenomenon.

These results are contradictory to the findings of Vogel[1974] for some individual Latin American countries, but support the more recent findings of Sheehey[1980]. Vogel found long lags in the effect of money supply on prices, and concluded that monetary stabilization policies will be harder to implement due to the length of time required for them to have their full effect. Sheehey, using data similar to the one used here,⁹ found that in most cases monetary policies had a much faster impact. This is what is observed in Turkey also. According to this analysis, changes in money supply will have a rapid effect on prices.

The implications of the naive monetarist model are quite straightforward. There is almost a one to one relationship between the money supply growth and the inflation rate. Faster growth of the money supply will lead to a higher inflation rate, predominantly within a year. This relationship also implies that when confronted with high inflation, reductions in money supply will lead to a rapid reduction in the rate of inflation. Therefore, monetary stabilization policies should be very effective in the short run to lower the rates of inflation. Indeed, at least for the last two years, the Turkish Government has been using monetary policies extensively. It is believed that the control of the money supply is the key for the reduction of the rate of inflation. It is also recognized among the officials that a deceleration in monetary growth would moderate inflation without retarding economic growth over a period of time. Recently, in an attempt to further bring this rate down interest rates have been raised to increase the volume of savings. Bank credits have been made more

expensive (in terms of the interest rates they charge to their customers) by increasing bank reserve and liquidity requirements and the discount rate.

When domestic inflation is under control, the formal policy objectives need to be shifted in a balanced way from price stabilization to the removal of external disequilibrium and long term restructuring of the economy. The current account deficits need to be reduced to historically low or financially manageable proportions of GNP, while sufficient capacity for import growth to sustain a steady expansion of employment and GNP close to potential output levels should be developed. Also methods should be developed to further increase Turkey's foreign exchange reserves. The development process needs reorientation towards trade improving activities, and requires a more effective integration of export promotion, and import substitution under reduced protection.

Thus, Chapter 4 attempts to analyze Turkey's transition period toward greater trade orientation. It discusses the characteristics of the pre-and post 1980 period, the relationship between trade and economic growth, and the effects of foreign capital inflows, and aid on economic growth.

REGRESSION RESULTS OF
THE RATE OF INFLATION IN TURKEY

Regression no:	estimates of regression coefficients									
	Constant	\dot{M}_t	\dot{M}_{t-1}	\dot{M}_{t-2}	Y_t	A_t	$\dot{M}P_t$	$\dot{M}P_{t-1}$	D.W.	F-stat.
(1)	-6.482 (2.13)	0.959 (5.85)	-0.164 (1.0)		0.014 (1.19)	0.0007 (0.06)	0.176 (4.16)		1.88	20.81
(2)	-7.194 (1.81)	1.028 (4.81)	-0.041 (0.19)		0.012 (0.78)	0.0063 (0.39)			1.64	12.66
(3)	-7.513 (2.63)	0.851 (6.90)			0.014 (1.24)	0.0018 (0.14)	0.169 (4.05)		1.88	25.75
(4)	-8.52 (3.04)	0.890 (7.38)					0.168 (3.84)	0.0005 (0.12)	1.65	34.01
(5)	-7.553 (2.71)	0.854 (7.16)			0.014 (1.27)		0.169 (4.16)		1.80	35.79
(6)	-7.298 (1.87)	1.043 (5.07)	-0.047 (0.22)		0.010 (0.71)				1.59	17.45
(7)	-9.029 (2.14)	0.993 (4.34)	-0.126 (0.55)	0.224 (0.73)					1.77	17.49
(8)	-7.599 (2.12)	1.011 (6.94)			0.010 (0.73)				1.52	27.19
(9)	-8.508 (3.09)	0.892 (7.65)					0.170 (4.17)		1.61	53.02
(10)	-8.550 (2.45)	1.043 (7.42)							1.48	55.05

1/ The numbers in parentheses indicate t-statistics.

2/ The dot over the variable indicates growth rates.

3/ Study covers the period of 1950-1980.

DATA

Year	GDP (Y)	GDP Deflator (P)	Import Prices (IMP)	Money Supply (M)	Expected Inflation (Pe)
1950	34.79	25.18	16.60	1.59	-
1951	39.18	26.96	18.60	2.02	-.03256
1952	43.34	27.77	18.40	2.42	-.02243
1953	48.39	29.17	17.70	2.95	.05465
1954	46.91	30.54	20.20	3.37	.03220
1955	51.03	33.89	24.60	4.21	.05523
1956	53.24	37.74	24.70	5.36	.09868
1957	58.02	46.34	31.30	6.87	.10087
1958	60.67	52.97	70.10	7.42	.12785
1959	62.61	63.67	124.10	8.70	.15700
1960	64.66	66.39	94.40	9.27	.21634
1961	65.57	69.25	76.60	10.03	.08666
1962	68.96	76.47	77.30	10.96	.01719
1963	75.72	80.50	78.30	12.17	.03985
1964	78.90	82.19	97.00	14.00	.06005
1965	80.78	84.57	94.50	16.43	.01368
1966	90.35	85.51	93.50	19.79	.06014
1967	93.83	96.47	101.30	22.69	.05394
1968	100.90	100.00	100.00	25.97	.05961
1969	106.89	104.51	99.30	30.13	.04258
1970	112.46	116.59	114.30	35.27	.05330
1971	122.31	137.28	154.00	43.59	.10651
1972	129.32	159.67	158.40	53.25	.18973
1973	135.05	196.72	181.00	70.53	.14572
1974	146.81	251.87	276.40	90.47	.15560
1975	159.94	292.85	319.20	119.09	.20963
1976	173.90	342.28	346.50	152.50	.19355
1977	183.81	433.82	430.19	211.97	.16435
1978	190.49	604.95	697.00	290.45	.22604
1979	189.51	1030.06	1220.80	454.55	.46692
1980	193.46	1184.57	1389.20	612.17	.57483

Sources: SIS National Income series., Istanbul Consumer Price series by Chamber of Commerce., Central Bank., the World Bank (see 3.4)

Notes

1. Aylık Ekonomik Rapor, (Monthly Economic Report), Türkiye İİ Bankası, A.Ş., (Ankara: July 1984), pp.22-25.

2. "Turkey, Policies and Prospects for Growth", The World Bank Publications Unit, (Washington, DC., March 1980), p.23.

3. Ibid, p.64

4. R. Vogel, "The Dynamics of Inflation in Latin America, 1950-60", American Economic Review, (March, 1974).

E. Sheehy, " Money, Income and Prices in Latin America", Journal of Development Economics, (September 1980).

5. "Turkey, Policies and Prospects", pp.179-84.

6. H. Kizilyali , " Türkiye Ekonomisindeki Gelişmelerin Parasal Faktörlerle Açıklanması", Bogazici University Publications, (Istanbul 1978).

7. "Turkey, Policies and Prospects", pp.179-84.

8. F-tests conducted in an attempt to test this " one to one " relationship support our hypothesis that inflation in Turkey is a monetary phenomenon. We put a restriction on each of the four models listed in the text by setting $H_0: B_1 = 1$, where B_1 is the coefficient of the current money supply growth, and conducted multiple regression analyses on all. We used the SSEs [sum of squared errors] of both the restricted and the unrestricted models to calculate the F-statistics. These are 0.018, 0.061, 0.021, 0.877 for the models (1), (2), (3), and (4) respectively. We have failed to reject the the null hypothesis, $B_1 = 1$, at 0.05 significance level, and thus conclude that given our data set, there is almost a 1:1 relationship between the money stock and the inflation rate.

9. E. Sheehy, " Money, Income and Prices in Latin America ", pp. 354-56.

CHAPTER IV

TRADE STRATEGY AND TRADE ORIENTED GROWTH

1. Inward Oriented Industrialization in Turkey, 1960-73

The development policies followed in Turkey traditionally favored import substitution over exports and industry over agriculture. The application of these policies permitted rapid industrial growth as the imports of non-durable consumer goods and their principal imports were replaced by domestic production. These products tended to be labor intensive and did not require large scale production for efficient operations, with costs rising relatively little at lower output levels. Thus, they were well-suited to the conditions existing in Turkey.

Then followed the establishment of some industries producing intermediate products which replaced the imports of intermediate goods, producer and consumer durables by domestic production. Furthermore, this became the dominant force in Turkey's industrial development. These industries, however, offered less favorable conditions. They required large scale production for efficient operations, with costs substantially higher at the low output levels.

This stage of import substitution, aggravated by the inefficiencies experienced by the SEEs which account for one third of manufacturing output in Turkey, led to a decline in the productivity of investment and raised the capital requirements of employment creation. Yet, Turkey was able to avoid a decline in its rate of economic growth as rapid increases in workers' remittances permitted raising the rate of investment.

In reducing the share of foreign trade in the national economy

through import substitution and discrimination against exports, the inward oriented policies followed entailed considerable costs for the economy that were rising over time. While the adverse effects of these policies were temporarily alleviated through increases in workers' remittances, Turkey was not prepared for the external shocks it experienced after 1973.

2. Policy Responses to External Shocks and Economic Growth, 1973-78

Along with other developing countries, Turkey suffered external shocks of considerable magnitude in the 1973-78 period. These included the quadrupling of oil prices in 1973-74 and the world recession of 1974-75, followed by a slow recovery. Also, taking account of the reduction in the volume of exports due to the deceleration of the world demand, the balance of payments deficit, roughly defined as excess foreign outlays over foreign receipts, reached 5.4 percent of GNP during this period¹. Rather than restricting aggregate demand to curb this deficit, the response of successive Turkish Governments to external shocks was to borrow abroad to maintain past rates of economic growth. In fact, economic growth accelerated after 1973 as the share of gross domestic investment in GDP increased from 17.5 percent in 1963-73 to 22.7 percent in 1974-76².

The acceleration of economic growth, in turn, added to Turkey's import needs. Finally, it lost market shares in traditional as well as non-traditional exports, further adding to foreign borrowing requirements. These changes in export and import shares can be explained by the policies applied. Exports were discouraged both by the apprecia-

tion of the real exchange rate, and by increased import restrictions which made production for domestic markets highly profitable and raised the cost of domestically produced inputs.

Although high protectionist measures were taken, Turkey was not able to save foreign exchange through increased import substitution for two reasons: the rise in domestic investment necessitated higher machinery imports, and expanding industries required considerable amounts of imported materials, intermediate products, and machinery. Also, the overvalued Turkish currency made foreign industrial goods relatively cheap in Turkish currency. Thus, Turkey represented an extreme case of inward-oriented policies, coupled with heavy reliance on foreign borrowing in the 1973-78 period. The debt service ratios increased from 14 percent in 1973 to 33 percent in 1977, declining to 26 percent in 1978 when liquidity problems limited further borrowing.³ The reasons for this increased debt service ratios were a growing bill for the imported oil, the structure of the debt which was mostly short term, and also the hard terms of the rescheduled debt.

3. The Effects of the 1980 Stabilization Policies⁴

In Chapter 2, we outlined the main issues of the stabilization package introduced to eliminate the shortages and the bottlenecks the economy has experienced. Here, in this section we discuss the effects of those implemented policies.

1. The premium on the T.L. in the parallel exchange market, averaged 50 percent in 1979, declined to 2-3 percent. Also, with increases in domestic oil prices, totalling almost to 200 percent from 1978 to 1983, Turkey was able to avoid the foreign exchange bottleneck that

characterized the 1978-79 period.

2. The increases in SEE prices lowered the net borrowing requirements of the public sector by reducing the deficits of the SEEs.

3. The devaluation of the local currency gave incentives to the export sector and the dollar value of exports jumped 63 percent in 1981, and even larger increases were shown for manufactured exports.

4. Manufactured exports continued to rise in 1981 exceeding the figures in 1980 by 120 percent. The Middle East accounted for a large part of this increase, with its share reaching 43 percent compared to 13 percent in 1979 and 22 percent in 1980. In turn, the share of the European Common Market fell from 43 percent to 33 percent [see Table 21].

5. The provision of low interest bearing agricultural credits as compared to other types of credits helped to increase agricultural production. The volume of agricultural exports increased at a rate of 7.2 percent per year starting in 1977 as compared to 4 percent during the 1962-76 period, and the share of exports in agricultural production increased from 3.6 percent in 1977 to 6.4 percent in 1983.⁵

6. The dollar amount of foreign investment and the number of foreign firms operating in Turkey shown a significant increase. [For a list of the foreign firms currently operating in Turkey, see Table 22]

7. In response to rising interest rates, time deposits and certificates of deposit increased to a considerable extent.

8. Inflation is brought under control with the implementation of restrictive monetary policies, as discussed in Chapter 3.

TABLE 21
TURKEY'S INTERNATIONAL TRADE
(in millions of dollars)

	1980		1981		1982	
	Amount	% share	Amount	% share	Amount	% share
EXPORTS						
EEC.....	1,251	43.0	1,503	32.0	1,755	30.5
West Germany....	604	20.8	643	13.7	707	12.3
Italy.....	218	7.5	246	5.3	327	5.7
France.....	164	5.6	216	4.6	195	3.4
United Kingdom..	105	3.6	148	3.1	169	3.3
Netherlands.....	84	2.9	96	2.0	105	1.8
Belgium/Luxemb..	56	1.9	60	1.3	144	2.5
Other.....	20	0.7	94	2.0	88	1.5
MIDDLE EAST &						
NORTH AFRICA.....	654	22.5	1,943	41.3	2,690	46.8
Iraq.....	35	1.2	559	11.9	610	10.6
Libya.....	60	2.1	442	9.4	235	4.1
Iran.....	85	2.9	234	5.0	791	13.8
Saudi Arabia....	44	1.5	187	4.0	358	6.2
Other.....	430	14.8	521	11.0	696	12.1
United States.....	127	4.4	268	5.7	252	4.4
Switzerland.....	125	4.3	264	5.6	323	5.6
U.S.S.R.....	169	5.8	194	4.1	124	2.2
Japan.....	37	1.3	35	0.7	43	0.7
Other.....	547	18.7	496	10.5	559	9.8
TOTAL EXPORTS.....	2,910	100.0	4,703	100.0	5,746	100.0
	1980		1981		1982	
	Amount	% share	Amount	% share	Amount	% share
IMPORTS						
EEC.....	2,268	28.7	2,519	28.2	2,466	28.2
West Germany....	638	10.6	940	10.5	1,009	11.5
Italy.....	300	3.8	372	4.2	415	4.7
France.....	377	4.8	400	4.5	263	3.0
United Kingdom..	317	4.0	434	4.9	433	5.0
Netherlands.....	205	2.6	166	1.9	158	1.8
Belgium/Luxemb..	158	2.0	153	1.7	147	1.7
Other.....	73	0.9	54	0.5	41	0.5

TABLE 21
(continued)

	1980		1981		1982	
	Amount	% share	Amount	% share	Amount	% share
IMPORTS						
MIDDLE EAST &						
NORTH AFRICA.....	3,026	38.3	3,557	39.8	3,678	42.1
Iraq.....	1,237	15.6	1,564	17.5	1,310	15.0
Libya.....	778	9.8	789	8.8	920	10.5
Iran.....	803	10.2	515	5.8	748	8.6
Saudi Arabia....	106	1.4	410	4.6	411	4.7
Other.....	102	1.4	410	4.6	411	4.7
United States.....	442	5.6	589	6.6	813	9.3
Switzerland.....	348	4.4	533	6.0	330	3.8
Japan.....	113	1.4	206	2.3	357	4.1
Other.....	1,712	21.6	1,529	17.1	1,091	12.5
TOTAL IMPORTS.....	7,909	100.0	8,933	100.0	8,735	100.0

Source : State Institute of Statistics, 1983

TABLE 22
LIST OF MAJOR FOREIGN INVESTORS IN TURKEY

Name of foreign firm	Product	Country of Origin
AEG	Electrical Articles	West Germany
Atlas Copco	Air Compressors	Belgium
Bayer	Pharmaceutics	West Germany
	Chemicals	
BASF	Chemicals	West Germany
Bosch	Injectors	West Germany
Conradi	Electro Plating	West Germany
Ciba Geigy	Chemicals	Switzerland
Coca Cola	Soft Drinks	USA
Daimler Benz	Commercial Vehicles	West Germany
Eternit	Pipes and Tubes	Switzerland
Fiat	Automobiles	Italy
General Electric	Electric Light Bulbs	USA
Goodyear	Tires	USA
Hoechst	Pharmaceutics	West Germany
Henkel	Chemicals, Margarine	West Germany
International Harvester	Agricultural Machinery	USA
Jeumont Schneider	Transformers	France
Kortenbach	Umbrella Frames	West Germany
Kulenkampf	Tabacco Processing	West Germany
Lucas	Injectors	United Kingdom
LMT	Telephone Switchboards	France
Merck	Pharmaceutics	West Germany
M.A.N.	Commercial Vehicles	West Germany
Mannesman	Pipes and Tubes	West Germany
Marelli	Compression Parts	Italy
Northern Telecom	Electrical Articals	Canada
Nestle(*)	Chocolate	Switzerland
Philips	Electric Light Bulbs	Netherlands
Pfizer	Chemicals	USA
Pepsi Cola	Soft Drinks	USA
Petrochemical Industries	Fertilizers	Kuwait
Pirelli	Tires	Switzerland
		United Kingdom
		Italy
Oy Nokla	Cables	Finland
Roche	Pharmaceutics	Switzerland
Renault	Automobiles	France
Schering	Pharmaceutics	West Germany

1

Under Law No:6224

(*)Operating under decree No:17

TABLE 22
(continued)

Siemens	Electrical Goods & Cables	West Germany
Sandoz	Chemicals, Insecticides	Switzerland
Singer	Sewing Machines	USA
Sadolin	Paints	Denmark
Thyssen	Cutting Machines	West Germany
Tuborg	Beer	Denmark
Uniroyal	Tires	USA
Unilever	Margarine, Vegetable Preserves	Netherlands
Vereinigte Edelstahlwerke	High Grade Steel Parts	Austria
Ytong	Building Sections	Sweden

BANKS

American Express	USA
Bank of America	USA
Banco Di Roma(*)	Italy
Hollandse Bank Unie(*)	Netherlands
Citibank	USA

INTERNATIONAL INSTITUTIONS

International Finance Corporation (IFC)
Islamic Development Bank (IDB)

Source : OECD, 1983 pp.77-78

4. Foreign Trade Regime, Post-1980 Period

The policy reforms of the 1980 led to improvements in Turkey's economic performance in several ways. The large devaluation of the Turkish Lira in Jan.1980 provided increased incentives to agricultural and industrial exports. At the same time, the responsibilities for export promotion, which up to then had been dispersed among various ministries were centralized in a new department within the State Planning Organization (SPO), the Office of Incentives and Implementation (henceforth referred to as TUD- Tesvik Uygulama Dairesi). Also exporters were given the right to import materials and intermediate inputs duty-free under the Foreign Exchange Allocation Scheme. In May 1980, the Foreign Exchange Retention Scheme was extended to include exporters of fresh fruits and vegetables and Turkish contractors abroad. In January 1981, exporters were granted income tax reductions, and export oriented investments received increased incentives.

The Government also took steps to liberalize the Import Regime. In January 1980, import regulations were simplified and the commercial banks were allowed to retain a higher proportion of foreign exchange deposited with them. In January 1981, the Quota List was abolished and about 200 items were transferred from the restricted List to the free import list.

4.1. Export Incentives

During the last two decades, a series of measures were taken by the successive Turkish Governments to provide incentives for industrial exports in the form of indirect tax rebates, access to preferential export credits, foreign exchange allocation and retention schemes, and

temporary import permits. However, until January 1980, the impact of these measures was limited by the overvaluation of the Turkish Lira as well as by the dispersion of responsibilities among various ministries.

4.2. The Export Tax Rebate Scheme

The aim of the Export Tax Rebate Scheme is to reimburse exporters for indirect taxes paid at earlier stages of production. At the same time exporters are exempted from indirect taxes payable on their sales in foreign markets. Such a scheme does not provide export subsidies, but only provide equal treatment to all producers as far as indirect taxes are concerned.

There are four categories of indirect taxes which are taken into account in determining the indirect tax content of the product. These are the production tax paid on raw materials and intermediate goods; taxes on labor; taxes on direct expenses (energy, water, packaging, interest); and taxes on indirect expenses, i.e., amortization, sales expenses.

Following June 1979 devaluation, the basic rebate rates were reduced and the ceiling for the application of the 5 percent of the supplemental rebate was raised to \$4.0 million, and a second supplemental rebate was introduced for firms with annual export earnings in excess of \$15 million, entitling them for a rebate of 10 percentage points above the
6
basic rate.

Table 23 shows total exports receiving tax rebates, and the amount of rebates from 1975 to the second quarter of 1981. The share of exports subject to tax rebates reached a peak of 50 percent in 1977 and declined in following periods to 23 percent in early 1981. However, following the

modification of the tax rebate lists in May 1981, the share of exports subject to tax rebates increased from 23 percent to 37 percent between the first and second quarter in 1981.

Table 23

EXPORT TAX REBATES, 1975-SECOND QUARTER 1981

	total exports	exports receiving tax rebate	tax rebates	share of exports subject to tax rebate in total exports	ratio of tax rebates to Value of Xs receiving tax rebates
----- TL million -----				----- percent -----	
1975	20,075	7,412	1,279	36.9	18.6
1976	30,768	14,434	3,117	46.9	21.6
1977	31,339	15,575	3,400	49.7	21.8
1978	55,358	19,734	2,938	35.6	14.9
1979	75,744	24,597	3,290	32.5	13.4
1980	230,730	55,030	4,905	23.9	8.9
1981					
First Quart. 96,199.1	22,242.0	1,841.0	23.1		8.3
Second Quart. 96,351.4	35,877.2	3,489.0	37.2		9.7

Source : Central Bank Quarterly Publications, Sept.1981 p.59

4.3. The Export Credit Scheme

Industrial exporters may have access to export credits through two different channels: (i) in cases when a firm does not hold a letter of credit for its prospective export transaction, it may apply to TUD to obtain an Export Encouragement Certificate upon making an export pledge, and then turn to a commercial bank for obtaining the credit; and (ii) in cases when a firm holds such a letter of credit, it may apply directly to the commercial bank. The credit limit and the conditions of the export credit are determined differently under each alternative.

Credit Limits: In the case of requests submitted to TUD for credits for

Certificate, the credit limit is determined by the use of two methods. (i) evaluation at cost; where the relevant indicator is the production cost in terms of domestic currency, and (ii) export price evaluation, with the f.o.b. price in dollar terms as the relevant measure. In the case of evaluation at cost, the credit limit is calculated at 80 percent of the value of the transaction for all products. In the case of export price evaluation, the credit limit is calculated at 80 percent of the value of the transaction for products such as non-electrical machinery and transport equipment; and 70 percent for products such as food processing and chemicals.

The credit limit for the certificate is then set according to the type of evaluation. For firms exporting more than \$15 million per year, the credit limit is determined according to evaluation at cost, and set at 90 percent of the value of the transaction; and in the case of requests submitted directly to commercial banks for export credits without Certificate, the credit limit is set in principle at 100 percent of the amount of the letter of credit, although banks do not exceed 80 percent of this amount in practice.

The term of export credits is up to 8 months, but firms may request an extension of the term to 12 months. In cases where at least 60 percent of the export pledge has been fulfilled, extension is granted in most instances. However, in cases where the realization rate is lower, extension is granted only under special conditions. Defaults are penalized by an increase in the interest rate, the imposition of stamp and other duties.

In early 1982, a sharp increase in the use of export credit facility has been observed. According to TUD officials, total export credit given,

both with and without Certificate, amounted to TL 83 billion at the end of May 1982, as against a Central Bank ceiling of TL 85 billion for the first half of the year. This evolution generated suspicion at the Central Bank that part of these credits may be diverted to the short term domestic market by firms that take advantage of the differential between the subsidized rate and the commercial rate, despite the penalties involved in the non-realization of the export pledge. At the end of May 1982, the Central Bank instructed commercial banks to stop the processing of applications for export credits and to start inquiries about applicants without previous export performance records.⁸ The temporary freeze on export credits imposed by the Central Bank was lifted at the end of June 1982.⁹

4.4. The Foreign Exchange Allocation Scheme

The foreign exchange allocation scheme ensures priority access to foreign exchange for exporters who already have obtained an export credit with or without certificate and to exporters who do not have an export credit, but make an export pledge to TUD. Since January 1980, the allocation can be used for the duty-free importation of raw, intermediate and packaging materials in export production, as well as for duty-free inclusive importation of equipment destined for reinsuring specific bottlenecks encountered in production for export. However, the total amount of the foreign exchange allocation may not exceed 60 percent of the f.o.b. value of the export pledge.

The export pledges are evaluated by TUD to determine their foreign exchange content. Since May 1981, a distinction has been made between projects with a foreign exchange content of less than 60 percent, and

projects with import content higher than 60 percent, for which an in-debt analysis is carried out.

Upon receiving an Encouragement Certificate, which determines the amount of foreign exchange to be allocated to their project, exporters apply to the Ministry of Commerce for a Foreign Exchange permit, which has to be delivered within four months of the application, but is obtained usually within one or two weeks. Under the 1980 reform, importation had to be completed within four months following the receipt of the permit. Since May 1981, the realization period has been extended to six months. If the importation is not completed within this period, the Ministry of Commerce may extend it by another six months upon delivery of a new Certificate by TUD.

The Encouragement Certificate, together with the Domestic Production Certificate, issued by the Ministry of Industry and Technology, also allows exporters to import machinery and equipment that is not included on the Liberalization lists.

Since May 1981, firms that have received an export credit and have fulfilled their pledge within a 12 month period may, within four months of the completion of their pledge, apply to TUD for a foreign exchange allocation corresponding to the raw, auxiliary, and packaging materials used for the realization of that export. This allocation represents 80 percent of the f.o.b. value of pledge and entitles the exporters to import at most 50 percent duty-free for further use for its future exports, the remaining 50 percent corresponding to imports inclusive of duty.

The foreign exchange allocations are subject to a ceiling which was increased from \$11 million in 1970 to \$170 million in 1979, but declined

to \$147 million in 1980. During the 1970-80 period, allocations of foreign exchange represented an average of 89 percent of the ceiling, while foreign exchange used represented 81 percent of the allocations.¹⁰

Along with these above mentioned export incentives, we should also shortly discuss the Foreign Exchange Retention Scheme and Income Tax Reduction for exporters.

Foreign Exchange Retention Scheme : Prior to 1979, exporters had access to 25 percent of their net foreign exchange earnings to import, subject to the relevant customs duties, intermediate inputs and equipment used in export production. In April 1979, the foreign exchange allocation was raised to 50 percent of net exchange earnings, and exporters were allowed to transfer these rights to their suppliers. Also in May 1980, the Scheme was extended to include Turkish contractors abroad. At the same time, exporters were allowed to transfer their rights not only to their own suppliers but also to any industrial user.

Income Tax Reduction for Exporters: Since 1981, industrial exporters with annual export revenues in excess of \$250,000 have been allowed to deduct up to 20 percent of their annual export revenue from taxable income during the first year. In subsequent years, the deduction is 15 percent of the original amount, 30 percent on increments in exports. Foreign exchange earnings of the construction companies abroad are fully exempted from the income tax.

4.5. The Import Regime

Since the end of 1950's Turkey has followed an import substitution strategy which has provided considerable protection to domestic industry through a system of import licensing, import quotas, and restricted

access to foreign exchange, in addition to tariffs. The tariff rates applied on general imports have only been subject to minor modifications since the last revision of the Customs code in 1973. However, the introduction and the subsequent modification of special tariff rates on EEC imports has led to a duality in the structure of tariff protection in Turkey.

Annual import programs have itemized commodities under the free import list (Liberalization List 1), the restricted list (Liberalization List 2), the Quota List, the EEC consolidated list, and the list including imports under bilateral clearing arrangements. Furthermore, until 1980, the Central Bank determined the amount of foreign exchange available for import transfers, and thus controlled allocations of foreign exchange. Starting in 1980, however, import regulations were simplified and commercial banks were allowed to retain a higher proportion of foreign exchange deposited with them. Reforms introduced in 1981 carried further the liberalization process, in particular, through the abolition of Quota list, and the transfer of some items from the restricted list to the free import list.

Customs duties on commodities on list 1 were reduced by 10 percent, and on list 2 by 5 percent in 1973. A second round of reductions of 10 percent on List 1 and 5 percent on List 2 items occurred in 1976. These reductions were to be followed by a series of annual reductions starting in 1978, leading to the elimination of tariffs on List 1 by 1985 and on List 2 items by 1995.¹¹ However, after the reductions undertaken in 1976, further scheduled tariff reductions have been postponed indefinitely. This is due to the restrictions and quotas levied by EEC on Turkish textiles.

The reforms introduced in the framework of the 1980/81 Import Programs represent an important step toward the liberalization of imports in Turkey. However, further steps could be taken over the medium term to carry on the liberalization process of these programs, such as the liberalization of the importation of intermediate products and machinery. The consumption of the imported luxury goods may be restricted by the use of excise taxes. Additional incentives may be granted to infant industries on a temporary basis. To the extent possible, infant industry incentives should be provided in the form of production or investment subsidies rather than tariffs so as to encourage exporting. This is of particular importance in the electrical or non-electrical machinery, machine tool and electronics industries which may be regarded infant industries in Turkey, because the exploitation of economies of scale will not be possible in the confines of the domestic market.

5. The Relationship Between Exports and Economic Growth

The importance of the export sector in any of the developing countries' development plans has long been recognized. The provision of export receipts is the most important source of foreign exchange reserves of these countries, where, with the use of these reserves, they can import the skills, goods and services unavailable domestically, but needed to provide a basis for stable and relatively high rates of economic growth. Most of the literature in this area has centered upon the means of achieving economic growth in the export sector. According to the neoclassical theory, this growth can be achieved with the application of the theory of comparative advantage. In the modern theory of international economics this pattern of comparative advantage is explained in

terms of factor endowments, "...a country has a comparative advantage in the good that is relatively intensive in the country's relatively abundant factor".¹²

The literature written in this area, however, yields to rather conflicting conclusions. While some economists see trade as the 'engine of growth'¹³, others argue that trade is the source of instability in a developing country.

The traditional argument has been that the LDCs rely upon to a great extent, primary products for their export earnings. The exporters of these products can "easily become vulnerable to market developments in the other parts of the world. This can militate against the export sector's effectiveness in leading economic growth and introduce a significant risk".¹⁴ This risk can partly be due to the relative price inelasticities of both the supply and demand of primary products and partly due to the relatively greater influences of non-economic factors, i.e. weather. According to Walter and Areskoug's findings we observe that there is no guarantee that the export sector will be a reliable engine of growth.¹⁵

Another study conducted by Souter reaches the conclusion that "...there does seem to be some support for the hypothesis that export sectors of the LDCs can contribute to export instability".¹⁶ However, even if there is stability in the export sector, we can not neglect the existence of the theory of "immiserizing growth". What underlies this phenomena is the fact that the country experiences growth subject to some distortion. This distortion imposes a loss, and if this loss from this distortion outweighs the gain from growth, then immiserizing growth will follow.¹⁷

These above mentioned studies reflect the authors' doubts on the proposition that trade leads to economic growth.

5.1. The Data

Many empirical analyses have been conducted to find out the true relationship between exports and economic growth. In the following section, we attempt to find this correlation for Turkey. The data, listed at the end of this chapter is obtained from the various issues of International Financial Statistics and the State Institute of Statistics (SIS). The figures obtained through SIS were given in Turkish Liras and are converted into U.S. dollars by the official exchange rate, relevant to that corresponding time period. In this analysis a 33 year period is covered (1950-1983), and the Ordinary Least Squares technique is employed. The definitions of the variables are:

Y1 = GDP

Y2 = GNP

X = Exports

M = Imports

5.2. Empirical Results and Conclusions

Here, we employ the models used by C.Voivodas.¹⁸ Equation (1) shows the relationship between the output growth rate and the ratio of exports to output. The output is first measured by GDP. Numbers in parenthesis indicate t-statistics.

$$\Delta Y1/Y1 = 0.098 + 2.5136 X/Y1 \quad (1)$$

(0.5184) (0.622) R2=0.027

When output is measured by GNP, we observe similar results:

$$\begin{array}{rcl} \Delta Y_2/Y_2 = 0.0905 + 2.7683 X/Y_2 & & (2) \\ (0.453) \quad (0.644) & & R^2 = 0.028 \end{array}$$

Both results are not good, and only 2.7 percent of the variation in output growth rate is explained by the export-output ratio.

For the same data set we now use a different regression model in an attempt to test the output-export function in forms that are different from those specified in equations (1) and (2). The rate of growth of output is regressed on the proportion of export change to national output. Why we prefer a different model rather than the ones already specified in equations (1) & and (2) can be explained as follows:

When we attempt to regress output on exports, or if x dollars of exports are expected to have an effect on output, the form of the function would be:

$$\Delta Y = a + b \Delta X$$

If we wish to avoid the effect of different currency units and size of country, and if we wish to talk in terms of rate of change of output, we would use the form:

$$\Delta Y/Y = a + b \Delta X/X$$

Finally, if the rate of growth of Y is held to be dependent on the rate of growth of exports, $\Delta X/X$, then the form of the function becomes:

$$\Delta Y/Y = a + b \Delta X/X * X/Y$$

This last function includes the so called "openness coefficient" (i.e. the relative size of a country's exports to its GNP) which is employed in the following equations. Also, GDP and GNP are used as measures of output, respectively.

$$\Delta Y1/Y1 = 0.1406 + 7.22932 \Delta X/Y1 \quad (3)$$

$$(4.54) \quad (3.54) \quad R^2 = 0.47$$

$$\Delta Y2/Y2 = 0.1388 + 7.7633 \Delta X/Y2 \quad (4)$$

$$(4.62) \quad (3.78) \quad R^2 = 0.50$$

Equations (3) and (4) yields not only positive but also much stronger relationships between these variables, and also a better fit. Furthermore, R^2 is much higher, and thus explains about 50 percent of the variation in output growth. These positive results can largely be attributed to the structural changes in Turkish trade regime, and this country's switching from being a closed economy to an open economy, especially since early 1980. Thus, we conclude that the increase in exports has been very effective and stimulative in the increase in output growth.

Other studies done with respect to the hypothesis that we test here also supports our conclusion. Michael Michaely, in an empirical investigation for 41 developing countries²⁰, and Bela Balassa in his test of the hypothesis that "export oriented policies lead to a better growth performance than policies favoring import substitution"²¹ reach similar conclusions that there is a strong positive correlation between these two variables. This positive correlation, Balassa notes, is due to the fact that "...export oriented policies, which provide similar incentives to sales in domestic and in foreign markets, lead to resource allocation according to comparative advantage, allow for greater capacity utilization, permit the exploitation of economies of scale, generate technological improvements in response to competition abroad, and in labor surplus countries, contribute to increased employment".²²

6. The Effects of Foreign Capital Inflows & Aid on Economic Growth

It is generally believed that foreign capital inflows, including aid, play a strategic role in promoting progress toward economic growth in developing countries. Rosenstein-Rodan notes that,

"the purpose of an international program of aid to underdeveloped countries is to accelerate their economic development up to a point where a satisfactory rate of growth can be achieved on a self sustaining basis... Thus the general aim of aid is to provide in each underdeveloped country a positive incentive for maximum national effort to increase its rate of growth. The increase in income, savings and investment which aid indirectly makes possible will shorten the time it takes to achieve self sustaining growth".(23)

The rich countries can provide development assistance, namely aid, to the developing countries either by outright transfers of resources in the form of goods or cash grants, or by means of various forms of capital aid. What distinguishes capital aid from an outright grant is the fact that since the principal of the loan must ultimately be paid in the future by the borrowing country, it is not the provision of the loan, but the term which is granted, that is the length of the grace period, amortization and the rate of interest. Such aid is usually granted by bilateral agreements (intergovernmental loans), or by multilateral arrangements (through the international development agencies).

Without foreign aid, a developing country during its transition period, must provide all the requirements of accelerated economic growth from its own resources, or from imports paid by its exports. This requires an increase in skills, domestic savings, export earnings, and also an allocation of these resources to satisfy the changing demands resulting from rising levels of income. Thus in theory, foreign aid, by relieving any possible constraint on the above mentioned factors can make

possible the fuller use of domestic resources and hence accelerated growth.²⁴

Many analyses on the effects of foreign aid and capital inflows on economic growth have been conducted during the last decade. A number of these criticize donor countries' aid programs, and argue that foreign inflows, especially aid, make little or no contribution to economic growth on the grounds that will be discussed below.

Numerous essays have concluded that only a fraction of foreign inflows has been additive to domestic savings while a large share of it was used to increase consumption. The process of growth with a varying inflow of capital requires a continued adjustment in imports and exports to make the trade gap equal to the desired gap between investment and saving. Yet, given the assumption that savings equal to investment minus foreign inflows, as long as the effect of an additional unit of foreign resources on investment is less than one, its effect on savings will appear to be negative.²⁵ The critical analyses agree that for every dollar of inflow, average impact has been to increase investment by only \$ 0.11 to \$ 0.77.²⁶ Papanek cites a number of analysts who have shown statistical evidence that capital inflows cause a reduction in domestic savings, and that the magnitude of this reduction is measurable.²⁶ Furthermore, Chenery, speaking of Latin America notes that, "aid has been a substitute for savings, not an addition to investment. The savings rate has decreased and there has been no increase in the overall growth rate of the GNP".²⁸

Most critics also complained about the instability of the volume of aid. There has been a downward trend in the volume of official development assistance, although lately this seems to be changing, in

nominal terms. A number of economists have argued that the burden of aid should be shared among the economically rich countries equally, resembling a system of international taxation. Yet, in the absence of a world government with effective powers of taxing, the implementation of such taxing would be left entirely to the goodwill of the concerned governments.

Also, the qualitative aspect of aid is at least as equally important as its volume. The provision of aid by the developed countries to LDCs was primarily designed to promote commercial, political and balance of payments interests of their own, i.e., selling equipment and machinery for not well planned projects in LDCs, often on hard commercial credit terms, and tying of aid to the goods of the supplying countries. The latter criticism, aid tying, serves as disguised subsidy to the aid producing enterprises in the donor country; if this is the case, then aid should be shown as an internal subsidy to the concerned sectors of the donor country, not as foreign aid. As far as the qualitative aspect of aid is concerned, Fei and Paauw conclude that "...capital assistance alone will merely permit a country to live beyond its means. Hence, if assistance is to be given, there must be agreement on the measures to be adopted to promote greater self help, and technical assistance may be required to carry out these measures".²⁹

An increasing number of economists do not accept the proposition that aid is given solely for the purposes of economic development. W. Hufziger notes that, "...foreign aid is usually in the national self-interest. Economic aid like military assistance can be used for strategic purposes,...aid supports economic interests by facilitating private investment abroad, improving access to vital materials, expanding demand

for domestic industry, and subsidizing or tying of exports"³⁰. Papanek argues that "most aid is allocated in large part on the basis of political considerations"³¹. Griffin and Enos note that "...Objective of aid is the advancement of ideology,...how much a country lends to another country will not be determined by its needs, but by the benefit it yields in terms of political support,...economic aid is merely one other instrument of foreign policy..."³². Finally we can cite Chenery who stated that "...the main objective of foreign assistance, as many other tools of foreign policy is to produce the kind of political and economic environment in the world in which the United States can best pursue its own social goals".³³

It is true that the opportunity cost of aid is very high, since especially during periods of chronic balance of payments deficits, structural adjustment policies such as tax reforms, expenditure switching policies and devaluation of domestic currency are postponed to future periods, placing the burden on the following generations. Furthermore, aid may cause misallocation of resources, and may distort domestic prices in recipient country.

6.3. Empirical Results and Conclusions

The data for this study is obtained through the various issues of International Financial Statistics, and is listed at the end of the chapter. The study covers a period of 33 years, 1950-83. The definitions of the notations that will be used are as follows:

Y1 and Y2 = output, measures as GDP and GNP respectively

$\Delta Y/Y$ = annual rate of growth of output

F = foreign capital inflows, measured as $F = M - X$

S = gross domestic savings

X = exports

M = imports, where $M = \overset{0}{\text{imports of capital goods}}$

We first test the relative impact of foreign capital inflows, F, on the output growth. Here, we adopt the regression model used by B. Cohen³⁴.

$$\Delta Y / Y = b/g \left[\frac{F}{Y} + \frac{X}{Y} - \overset{c}{M} \right]$$

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The equation states that there is a positive correlation between output growth rate and the ratio of exports to total output with positive intermediate link between exports and capital goods imports.

Using GDP and GNP respectively as the output, the results of the regression are as follows (the numbers in parenthesis indicate t-statistics) :

$$\Delta Y_1 / Y_1 = 0.0700 + 5.476 \Delta X / Y_1 + 1.849 F / Y_1 \quad (5)$$

(1.88) (2.95) (2.65)

R²=0.65

$$\Delta Y_2 / Y_2 = 0.07258 + 6.0352 \Delta X / Y_2 + 1.7727 F / Y_2 \quad (6)$$

(1.97) (3.21) (2.50)

R²=0.66

The regression results show a positive relationship between the ratios of growth of exports to output and the foreign capital inflows to output to output growth rate. The coefficients of the independent variables are large and statistically significant. We observe that the inclusion of foreign inflows in our analysis not only gives us positive

correlation but also a higher R^2 for the model. Before we reach conclusion on the effect of foreign inflows on the output growth rate, we regress the ratio of foreign inflows to rate of growth of output.

$$\Delta Y1/Y1 = 9.0237 + 26.10 F/Y1 \quad (7)$$

$$(1.98) \quad (3.23)$$

$$R^2=0.42$$

$$\Delta Y2/Y2 = 9.4313 + 26.09 F/Y2 \quad (8)$$

$$(2.01) \quad (3.07)$$

$$R^2=0.40$$

Again, the coefficients of the F/Y ratio is positive and statistically significant. Thus, we conclude that foreign capital inflows had a positive impact on the output growth rate.

We now test the proposition that whether capital inflows have a positive impact on gross domestic savings. For this purpose we use the regression model used by Griffin and Enos.³⁵

$$S/Y1 = 0.201 + 0.067 F/Y1 \quad (9)$$

$$(15.33) \quad (0.28)$$

$$R^2=0.005$$

$$S/Y2 = 0.1997 + 0.0146 F/Y2 \quad (10)$$

$$(16.33) \quad (0.06)$$

$$R^2=0.003$$

We observe that the coefficient of the F/Y variable is very small and statistically insignificant, and thus conclude that foreign capital inflows have no impact on gross domestic savings in Turkey, or at least their impact on savings are insignificant.

Since no reliable data was available on aid figures the author was not able to conduct any statistical tests to find an empirical

relationship between aid and output growth rate. Yet, we can cite Griffin and Enos' results for Turkey for the period 1951-65, where the model they use tests the correlation between output growth rate and aid.³⁶

$$\begin{aligned} \dot{Q}_{t+1} &= 12.5 - 0.047A_t & R^2 &= 0.62 \\ & (0.011) \end{aligned}$$

where

\dot{Q} = percentage change in per capita GNP

A = aid, (foreign assistance)

They conclude that, "... if the percentage change in GNP is correlated with the amount of foreign aid received from 1951-65, the relationship between the two variables is negative. The correlation coefficient [R^2] is 0.62, and the regression coefficient is significant at 0.005 level. The lag between the dependent and independent variable here is one year, but different lags and different forms of the variables provoke no significant change in the sign of the relationship. To be sure, the gestation period for the projects financed by foreign assistance might well vary from project to project and year to year, so as to make any simple correlation impossible, but given this qualification, the thesis that aid may retard development can not be rejected".³⁷

We now summarize the regression results, and reach following conclusions for Turkey:

1. Foreign capital inflows and export growth stimulate, and have positive impacts on the output growth rate.
2. Foreign capital inflows, by themselves, do positively affect the output growth rate, by providing more investable resources, by making

more funds available to be spent on imports that are needed to maintain and satisfy the needs of an expanding economy, and by filling the foreign exchange gap that limits the pace of economic growth.

3. Foreign capital inflows have no significant impact on the gross domestic savings.

4. Given the theoretical justifications and the regression results of Griffin and Enos, the proposition that aid has negative consequences on output growth can not safely be rejected.

NOTES

1. Bela Balassa, "The Policy Experience of NIEs After 1973, Case of Turkey", paper presented at the Second Conference on the Role of Exchange Rate Policy in Outward Orientation of the Turkish Economy, held in Istanbul on July 1-2, 1981. Published by Meban Securities (1981) p.20, Table 3.

2. Ibid, p.20.

3. State Institute of Statistics, Statistical Tables. June 1982.

4. This section draws on the yearly reports of the Türkiye İstatistik Bankası, Yıllık Rapor 1982-83, Istanbul.

5. Turkey: Policies and Prospects for Growth, World Bank Publications Unit, (Washington, D.C., March 1980), p. 101.

6. Central Bank, Yearly Publication, 1982, pp.59-60.

7. Official Gazette No.18451, July 7, 1984.

8. İBA Newsletter, No.3293, June 1982.

9. EBA Report No.487, June 29, 1981.

10. Türkiye İstatistik Bankası, Yıllık Rapor, p.51.

11. Ibid, pp.68-70.

12. Wilfred Ethier, Modern International Economics, W.W. Norton & Company, Inc. (1983) p. 95.

13. Ragnar Nurkse, "Patterns of Trade and Development" Economics of Trade Development, ed. by J. Theberge (N.Y. John Wiley & Sons, Inc. 1966) pp.85-102.

14. Ingo Walter, Kaj Areskoug, International Economics, 3rd edition (N.Y. John Wiley & Sons, Inc. 1981), p. 214.

15. Ibid, p. 214.

16. Geoffrey N. Souter, "Export Instability and Concentration in the LDCs: A Cross Country Analysis", Journal of Development Economics, (September 1977) p. 295.

17. Jagdish Bhagwati & T.N. Srinivasan, Lectures on International Trade, MIT Press (1983), pp.251-252.

18. C.S. Voivodas, "Exports, Foreign Capital Inflow and Economic Growth", Journal of International Economics.3.(March 1973), 337-49.

19. Derek Healey, "Foreign Capital and Exports in Economic Development: the Experience of 8 Asian Countries", Economic Record, 49 (September 1973), p.410.
20. Michael Michaely, "Exports and Growth-An Empirical Investigation", Journal of Development Economics, 4. (1977), pp.49-52
21. Bela Balassa, "Exports and Economic Growth, Further Evidence", Journal of Development Economics, 5, (1978), p. 181
22. Ibid, p. 181.
23. P.N. Rosenstein-Rodan, "International Aid for Underdeveloped Countries", The Review of Economics and Statistics, No.43, May 1961, p. 107.
24. H. Chenery and A. Strout, "Foreign Assistance and Economic Development", The American Economic Review, No.4 September 1966, pp. 681-82.
25. G. Papanek, "The Effects of Aid and Other Resource Transfers on Savings and Growth in LDCs", Economic Journal, September 1972, Vol.82 No.327, pp.935-6.
26. Ibid, p.938.
27. Ibid, p.936. Weisskopf's, Chenery's, and Griffin and Enos' findings are cited.
28. Griffin and Enos, "Foreign Assistance: Objectives and Consequences" Economic Development and Cultural Change, Volume 18, No.3, April 1970, opt. cited p.321.
29. J. Fei and D. Paauw, "Foreign Assistance and Self Help", in The Review of Economics and Statistics, No.2, September 1975, p. 261.
30. Wayne Narziger, The International Economics of Development, (Belmont: Wadsworth Publishing Company: 1984), p.395.
31. Papanek, p.941.
32. Griffin and Enos, pp.315-6.
33. Ibid, 317.
34. B.I. Cohen, "Relative Effects of Foreign Capital and Exports on Economic Growth", The Review of Economics and Statistics 50 May 1968, p.75.
35. Griffin and Enos, p. 321.
36. Ibid, p.318.
37. Ibid, p.318.

CONCLUSION

This study analyzed the growth and stabilization policies of Turkish economy since the establishment of the Republic, with emphasis being placed on the measures taken following the implementation of the 1980 Economic Stabilization Program. A discussion of the major social and economic sectors is followed by an analysis of the stages of economic development. The first stage is the birth of statism, and thus the establishment of the State Economic Enterprises.

In an environment where there have been hardly any industry in Turkey during the 1930s, the creation of SEEs had strong promotional and educational objectives, such as to highlight the profits that would accrue to the country from industrialization, to demonstrate the workings of the modern industry, and to recruit and train a pool of industrial staff and workers. The public enterprise sector is a very important factor in the Turkish economy. SEEs generate about 8 percent of the GDP, and provide 10 percent of all non-agricultural wage employment. Also, their investment constitutes about 40 percent of the total public sector investment. Their performance and problems are also discussed, and conclusions are drawn. The policies implemented since 1980 helped to curb many serious problems that these enterprises had posed on the proper functioning of the economy. Yet, the future effectiveness of these implemented policies can only be evaluated assuming that the political environment in Turkey remains stable. It is a very hard task to predict the outcome, and speculate on the expected results of these policies in the years to come since political instability has been the single most important factor that has caused Turkey to experience the economic crises

of the late 1970s.

After the establishment of SEEs, the development process is analyzed in reference to two time periods. In the second time period (post-1960), the development strategy of the country is pursued in a less disruptive way than in the first time period (pre-1960). Economic planning was made a requirement in the 1960 Constitution, and was introduced in the form of a National Development Plan. Lastly, the circumstances that have led to the implementation of the economic stabilization package of 1980 are discussed.

The second part of this thesis started with an analysis of the dynamics of Turkish inflation, which has been one of the major problems of the economy in the postwar period. Following a brief history of inflation in Turkey, and major factors behind it, a test is conducted via the Harberger model in an attempt to find the relationship between the money supply and prices. The basis for using a monetarist model to test this relationship is due to the fact that not only various analysts have based their inflation studies in LDCs on monetarist framework, but also their results, including for Turkey, show that there is almost one to one relationship between the money supply and the inflation rate.

The results of the test conducted in this study also supports this relationship. They also show that the changes in money supply more or less complete their effect within one year, and almost fully reflected in price changes. Thus, this relationship implies that when faced with high inflation, reductions in money supply growth will lead to a rapid reduction in the rate of inflation. Therefore, monetary stabilization policies should be very effective in the short run to lower the rates of inflation. Indeed, this is what is observed in Turkey. The price level

showed a record decline after 1980, and inflation was brought under control with no major jumps being experienced.

The rationalization of foreign economic relations occupies an important place in the stabilization program implemented in January 1980. That is, in the last four years certain policies which have driven the Turkish economy into bottlenecks and supply shortages have been fundamentally changed, and important steps have been taken; from a strictly controlled exchange rate policy to a more flexible, daily regulated system, towards a more realistic system of encouraging exports, and towards an acceptable level of foreign debt. Following the implementation of the new program, and the structural changes in the foreign trade regime, exports have shown an extraordinary growth, and workers' remittances exceeded half of the total exports, and a balance was achieved in external payments without extreme dependence on foreign sources.

Although there have been a number of articles which reached the conclusion that LDC exports can lead to export instability, the importance of the export sector in any of the developing economies has long been recognized. In an attempt to find the true relationship between exports and economic growth, we have run regression analyses for Turkey. The results indicated a strong positive correlation between these two variables, and thus supported the hypothesis that exports stimulate economic growth. Various studies conclude that exports are more job and wage intensive. This also emphasizes the positive consequences of export incentives, since they would tend to raise the level of wages and employment.

Another study in this section examined the effects of foreign capital inflows and aid on economic growth. Regression results help us to draw conclusions about the effects of these variables. It is generally believed that foreign capital inflows, including aid, play a strategic role in promoting progress toward economic growth in developing countries. Our results indicated that the correlation between foreign output growth is positive. That is, foreign capital inflows had a positive impact on economic growth. Yet, due to data problems we were unable to test the relationship between foreign aid and output growth, so at this point of time we can reach the conclusion only on a theoretical basis, and state that given the objectives of donor countries, foreign aid may have negative consequences on economic growth.

We also tested the hypothesis that whether foreign capital inflows have an impact on domestic savings. The results obtained led us to the conclusion that capital inflows have no impact on savings, and the correlation is insignificant. This finding is rather controversial to Chenery and Strout's "two gap analysis", which states that the savings gap becomes the limiting factor to growth, and aid, becoming an addition to a country's savings increases its investable resources by the full amount of aid.

The positive results of the 1980 Stabilization Program, which are rarely encountered in other developing countries represent an unqualified success. Turkey is approaching the point where it can maintain a balance between dependence on foreign borrowing, and reliance on its own resources. Steps to be taken in the future will clearly be in the direction of departing from the current exchange rate system towards full convertibility of the Lira, significant reductions in trade barriers, and

becoming a full member of the EEC, which will make European markets more accessible to Turkish exporters. The realization of these steps will not only avoid the possibilities of facing such previous crises, but also to further reduce the trade deficits, and provide a higher standard of living for the Turkish society.

SELECTED BIBLIOGRAPHY

Books

- Balassa, Bela. "The policy experience of NIEs After 1973, Case of Turkey". The Role of Exchange Rate Policy in Outward Orientation of the Turkish Economy. Istanbul: Meban Securities, 1981.
- Bhagwati, J., and T. Srinivasan. Lectures on International Trade. MIT Press: 1983.
- Bulutoglu, K. "Financing Turkey's Development Plan." Planning in Turkey. eds. S. Ilkin and E. Inanc. Ankara: Middle Eastern Technical University Press No.9, 1967.
- Cohn, Edwin. Turkish Economic, Social and Political Change. New York: Praeger Publications, 1970.
- Darkot, B. Demographic Movements in Turkey. University of Istanbul. International Edition. No.2, 1955.
- Dervis, Kemal., and S. Robinson. "The Structure of Income Equality in Turkey, 1950-73." Political Economy of Income Distribution in Turkey. New York: Holmes-Meier Publications, 1980.
- Ethier, W. Modern International Economics. W.W. Norton & Company, Inc., 1983.
- Goymen, K. "The Nature and the Practice of Turkish Etatism." Ph.D. Dissertation, University of Leeds, 1973.
- Hale, William. The Political and Economic Development of Modern Turkey. London: Croom Helm Ltd, 1981.
- "Introducing Turkey's State Planning Publication." Ankara: SPO Publication No.3, 1963
- Kizilyali, H. Türkiye Ekonomisindeki Gelişmelerin Parasal Faktorlerle Açıklanması. Istanbul: Bogazici University Publications, 1978.
- Kurdas, Kemal. Reforming the Turkish Exchange System. Istanbul: Meban Brokerage and Finance Corp. Publication, 1979.
- Narziger, Wayne. The International Economics of Development. Belmont: Wadsworth, 1984.
- Nurkse, Ragnar. "Patterns of Trade and Development." Economics of Trade and Development. ed. J. Theberge. New York: John Wiley and Sons, Inc., 1968.
- Okcun, G. Turkish Economic Congress, 1923 Izmir. Ankara University, Faculty of Political Science Publication, 1968.

- Serin, Timur. Socio Economic Determinants of Differential Fertility in Turkey. Ankara: Hacettepe University, Institute of Population Studies, 1971.
- "The Second Five Year Development Plan, 1968-72." State Planning Organization. Ankara, 1969.
- "Statistical Tables". State Institute of Statistics, Ankara: June 1982.
- Timbergen, Jan. "Methodological Backgrounds of the Plan". Planning in Turkey. eds. S. Ilkin and E. Inanc. Ankara: Middle Eastern Technical University Publications, No.9, 1967.
- Torun, O. The Establishment and the Structure of State Planning Organization. Ankara: Economic Research Division, State Investment Bank. Middle East Technical University, 1967.
- "The Third Five Year Plan, 1973-1977." SPO. Ankara, 1973.
- "Trends in Fertility and Mortality in Turkey, 1935-75." Committee on Population and Demography. No.8. Washington, D.C.: National Academy Press, 1982.
- Turkey. Policies and Prospects for Growth. Washington, D.C.: The World Bank Publications Unit, March 1980.
- Turkey: Prospects and Problems of an Expanding Economy. Washington, D.C.: The World Bank Publications Unit, February, 1975.
- Walstedt, B. State Manufacturing Enterprise in a Mixed Economy: The Turkish Case. Baltimore, Maryland: John Hopkins University Press, 1980.
- Walter, I. and K. Areskoug. International Economics. 3rd ed. New York: John Wiley & Sons, Inc., 1981.

Periodicals

- "Yıllık Ekonomik Rapor". Türkiye İsa Bankası, A.Ş. (Ankara: July 1984), pp.22-25.
- Balassa, Bela. "Exports and Economic Growth: Further Evidence." Journal of Development Economics 5, (1978), p.181.
- Chenery H., and A. Strout. "Foreign Assistance and Economic Development." The American Economic Review 4, (September 1966), pp.681-82.
- Cohen, B.I. "Relative Effects of Foreign Capital and Exports on Economic Growth." Review of Economics and Statistics 50, (May 1968), p.75.
- Griffin, K.B., and J.L. Enos. "Foreign Assistance: Objectives and Consequences." Economic Development and Cultural Change 3:18, (April 1970), pp.315-321.
- Fei, J., and D. Pasuw. "Foreign Assistance and Self Help" The Review of Economics and Statistics 3, (September 1975), p.261.
- Healey, Derek T. "Foreign Capital and Exports in Economic Development: the Experience of 8 Asian Countries." Economic Record 49, (September 1973), p.410.
- I.B.A. Newsletter No.3293, (June 1983).
- Michael, Michael. "Exports and Growth: An Empirican Investigation." Journal of Development Economics 4, (1977), pp.49-52.
- "Official Gazette." No.14851, 7.July.1984.
- Papanek, G. "The Effects of Aid and Other Resource Transfers on Savings and Growth in LDCs." Economic Journal 82, (September 1972) pp.935-36.
- Sheehey, E. "Money, Income, and Prices in Latin America." Journal of Development Economics. (September 1980).
- Souter, Geoffrey N. "Export Instability and Concentration in the LDCs: A Cross Country Analysis." Journal of Development Economics. (September 1977), p. 295.
- Vogel, R. "The Dynamics of Inflation in Latin America, 1950-1960." American Economic Review. (March 1974).
- Voivodas, C.S. "Exports, Foreign Capital Inflows, and Economic Growth." Journal of International Economics 3, (March 1973), pp.337-49.
- "Yearly Publication, 1982." Ankara: Central Bank, (1982).
- "Yıllık Rapor 1982-83." Istanbul: Türkiye İsa Bankası, (1983).

GROWTH AND STABILIZATION POLICIES
IN AN EXPANDING ECONOMY:
TURKEY, 1963-1983

by

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ABSTRACT

This thesis analyzes the growth policies and outward orientation of the Turkish economy since the establishment of the Republic, with emphasis being placed on the measures taken following the implementation of the 1980 Economic Stabilization Program. The analysis is carried out in two major sections. The first one discusses socio-economic growth and development patterns, where the discussion of major social and economic sectors is followed by an analysis of the stages of economic development. This section also covers the establishments and the objectives of the State Economic Enterprises (SEEs) and the State Planning Organization (SPO) followed by the development plan period where economic planning was made a requirement and was introduced in the form of a National Development Plan, and the circumstances that have led to the implementation of the economic stabilization package.

The second section starts with an analysis of the dynamics of inflation in Turkey which has been one of the major problems of the economy in the post-war period. In an attempt to find the relationship between money supply and prices via monetarist models, the tests conducted yield to the result that there is almost one to one correspondence between these two variables. A number of studies conducted on this subject for a number of developing countries, including Turkey, also supports this conclusion. Thus, this relationship implies that, when faced with reductions in the money supply growth, a rapid reduction in the rate of inflation will follow. Therefore, monetary stabilization policies should be very effective in the short run to lower the rate of inflation. Indeed, this is what was experienced in Turkey. The price

level showed a record decline after 1980, and inflation was brought under control with no major jumps in price level being observed.

The rationalization of foreign economic relations occupies an important place in the stabilization program implemented in 1980. Following the structural changes in the foreign trade regime, exports showed an extraordinary growth, inflow of workers' remittances reached record levels, and a balance was achieved in external payments without extreme dependence on foreign sources.

The importance of the export sector in any developing economy has long been recognized, although there have been a number of articles which reached the conclusion that the growth in LDC exports will not lead to rapid economic growth. The tests conducted to examine the true relationship between exports and economic growth indicates a strong positive correlation between these two variables, and thus supports the hypothesis that exports stimulate economic growth.

It is generally believed that the foreign capital inflows and aid play a strategic role in promoting progress toward economic growth in developing countries. Given the results obtained for Turkey, we conclude that although foreign capital inflows have a positive impact, foreign aid maybe negatively correlated, and may have a negative impact on economic growth. Also, the tests we have conducted to find out whether there is a positive relationship between domestic savings and capital inflows lead us to the conclusion that capital inflows have no impact on domestic savings.

The positive results of the 1980 Stabilization Program, which are rarely encountered in other developing countries, represent an unqualified success. Turkey is approaching a point where it can maintain

a balance between dependence on foreign borrowing, and reliance on its own resources. Steps to be taken in the future will clearly be in the direction of departing from the current exchange rate system towards full convertibility of the Lira, significant reductions in trade barriers, and becoming a full member of the EEC, which will make European markets more accessible to Turkish exporters. The realization of these steps will not only avoid the possibilities of facing such previous crises, but also to further reduce the trade deficits, and provide a higher standard of living for the Turkish society.